Chapter 1 Introduction

Chapter 1 describes the purpose of and need for the management actions described and assessed in later chapters. Chapter 1 also presents introductory material to establish a context for fisheries management in the region, including an overview of the management structure for fisheries managed under the *Fishery Management Plan for the Pelagic Fisheries of the Western Pacific Region* (Pelagics Fishery Management Plan [FMP], Western Pacific Fishery Management Council [WPFMC] 1986, as amended). Following that overview, the context for this environmental impact statement (EIS) is established. The requirements for environmental impact assessment of fishery actions under the National Environmental Policy Act (NEPA) and National Oceanic and Atmospheric Administration (NOAA) Administrative Order 216-6 are described, as are the requirements for consultation under section 7 of the Endangered Species Act (ESA). Previous NEPA EISs for the Pelagics FMP and their implementing regulations are summarized, as are recent Biological Opinions (BiOps) on the effects of pelagics fisheries in the region.

The species managed under the Pelagics FMP and the fisheries themselves are then described. To put the Pelagics FMP fisheries into a Pacific Ocean-wide context, the fisheries conducted under the *Fishery Management Plan for U.S. West Coast Fisheries for Highly Migratory Species* (California, Oregon and Washington pelagic fisheries) (Pacific Fisheries Management Council 2003) are described, followed by descriptions of the foreign and non-FMP U.S. pelagic fisheries in the Pacific Ocean.

Chapter 1 concludes with a listing of permits, licenses and approvals required to implement the preferred management actions.

1.1 Statement of Purpose and Need for the Action

Two potential actions are assessed in this document. The objective of the first action is to reduce the adverse effects of interactions with seabirds from vessels authorized to fish under Hawaii longline limited entry permits. This would be accomplished through a regulatory amendment to the Pelagics FMP. Implementation of the action would proceed through promulgation of new regulations by the National Marine Fisheries Service (NMFS). Longline fishing operations of these vessels result in the inadvertent hooking, entangling and killing of black-footed albatrosses (*Phoebastria nigripes*) and Laysan (*P. immutabilis*) albatrosses that nest in the Northwestern Hawaiian Islands (NWHI). On rare occasions wedge-tailed (*Puffinus pacificus*) and sooty (*P. griseus*) shearwaters are also incidentally caught by these vessels. There is the potential for vessels in this fleet to interact with the short-tailed albatross (*Phoebastria albatrus*), a species listed as endangered under the ESA, although no such interaction has been documented. Based on NMFS' extrapolations from observer data, in 1999 the fleet is estimated to have interacted with 2,320 albatrosses (1,301 black-footed and 1,019 Laysan). In 2002, the fleet is estimated to have interacted with 113 albatrosses (65 black-footed and 51 Laysan). Between 1999 and 2002, the fishery changed in two ways: 1) the shallow-set sector of the fishery was closed, and 2)

seabird interaction avoidance measures were implemented in the deep set sector of the fishery. Estimates of fleet interactions for 2003 were 111 black-footed and 146 Laysan albatrosses.

While interactions between the Hawaii-based longline fleet⁴ and threatened and endangered species of sea turtles continue to drive litigation and management regime changes in the Hawaiibased longline fishery, several other issues in pelagic fisheries of the region have emerged since the 2001 Pelagics Final Environmental Impact Statement (FEIS) (NMFS 2001a) that have varying degrees of "ripeness for decision-making." Alternative methods of seabird interaction avoidance have the potential to further reduce the consequences of interactions with longlines in the Hawaii fishery. The shallow-set sector of the fishery historically had a greater seabird interaction rate than the deep-set tuna sector, although the efficacy of currently required seabird interaction avoidance measures in the shallow-set sector of the fishery is poorly documented due to the 2001 closure of that sector of the fishery. It is also unknown at this time how the changes in hook and bait types to be employed in the model swordfish fishery will affect seabird interaction rates. Another factor stimulating a reexamination of seabird interaction avoidance methods for the Hawaii-based longline fishery is recent technological developments. Scientists and fishermen around the world have been experimenting with techniques and equipment to reduce interactions between longline gear and seabirds. Two of these approaches, side-setting and the underwater setting chute, have been used elsewhere, but only recently have they been tested in Hawaii. The results have been promising, and the WPFMC believes it is time to assess a broader range of potential seabird interaction avoidance measures for their effectiveness compared to currently required measures.

As a consequence of these circumstances, this EIS analyzes a range of alternatives to reduce the effects of seabird interactions in the Hawaii limited entry longline fishery. Various strategies to reduce the effects of seabird interactions are examined. Reduction of longline-seabird interaction rates appears the best strategy to achieve the action objective, and a number of methods to reduce interaction rates, singly and in combination, are analyzed for efficacy in reducing seabird interactions, operational practicability, likelihood of compliance, and cost. A series of cooperative research trials with several seabird interaction avoidance measures was conducted between 2002 and 2003 on Hawaii-based longline vessels. The trials found that underwater setting chutes (which deploy baited hooks underwater and out of the reach of seabirds) and sidesetting (the longline is deployed laterally from amidships, rather than directly over the stern), were both effective in further reducing interactions with seabirds. This EIS examines a range of alternatives that would allow or require the use of one or more of these techniques to costeffectively further reduce the adverse effects of longline-seabird interactions in the Hawaii-based fishery. Also examined is the use of tori lines (also known as streamer or bird scaring lines) which have been found to be effective in reducing seabird interactions in the Alaska demersal longline fishery.

⁴The term Hawaii-based longline fishery refers to vessels registered to a Hawaii Longline Limited Entry Permit, which is required to fish for Pelagic Management Unit Species with longline gear in the Exclusive Economic Zone (EEZ) around Hawaii or to land or transship longline-caught Pelagic Management Unit Species shoreward of the outer boundary of the EEZ around Hawaii (59 Federal Register [FR] 26982). Vessels holding such permits, of which there are a maximum of 164, may or may not be physically based in Hawaii, but permit conditions apply wherever they fish.

A second issue addressed in this EIS is development of an industrial-scale, high seas U.S. squid jigging fishery in central and western Pacific Ocean waters. An existing operation consisting of four vessels has fished at least briefly within the Exclusive Economic Zone (EEZ) around Hawaii and landed product in Hawaii. As a result of a recent court decision (Turtle Island Restoration Network and Center for Biological Diversity v NMFS, D.C. No. CV-01-01706-VRW), it has been determined that each specific fishery authorized under the High Seas Fishing Compliance Act (HSFCA) must be assessed under NEPA before further permits can be issued for that fishery. As the North Pacific Ocean high seas squid jigging fishery has not been previously assessed under NEPA, inclusion of this issue here is appropriate and timely. The Council also believes it appropriate at this time to examine alternatives for monitoring and management of this fishery, as it has the potential to expand. Furthermore, with NMFS' and the Council's implementation of ecosystem-based fishery management, it is logical to consider management of squid resources because of their importance as prey species for seabirds, marine mammals, tunas, and billfish, especially swordfish. Ecosystem considerations also provide the rationale to assess alternatives for managing the existing small-scale coastal squid jig fisheries in Hawaii and those that may arise in other areas of the region.

As a consequence of these needs, a second action assessed in this document is enhanced monitoring and management of the U.S. squid jigging fisheries, including a nascent high seas industrial-scale fishery and several coastal small-boat fisheries. A better understanding of these fisheries will permit future evaluation of the necessity and form of management measures. Implementation of this action would be accomplished by amendment of the Pelagics FMP and subsequent promulgation of new regulations by NMFS, or by amendment of the regulations implementing the HSFCA. Two independent sets of alternatives for management of these fisheries are evaluated that would effect new or modified management regimes authorized under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act or MSA) and the HSFCA, respectively. Although high seas squid jigging is a very large international fishery, U.S. participation has been minimal to date, with four vessels intermittently participating in the fishery since 2001. In Hawaii, two coastal small-boat jig fisheries target squid for local consumption and tuna bait. In other areas in the Pacific Islands Region (Commonwealth of Northern Mariana Islands [CNMI] and Guam), development of squid fisheries is being contemplated. Assessment of the impacts of various potential management regimes for these fisheries is appropriate at this time. NMFS and the regional fishery management councils established under the MSA are implementing ecosystem-based management of fisheries (Ecosystem Principles Advisory Panel 2004). Because squid form an important prey base for many pelagic species including protected marine mammals and seabirds, as well as tunas and billfish, it may be appropriate to include squid in FMP for pelagic species. In response to reports of squid jigging occurring within the U.S. EEZ around the Hawaiian Islands and the landing of squid in Honolulu, The Western Pacific Fishery Management Council (WPFMC or Council)⁵ is considering management of squid species under its existing Fishery Management Plan for the Pelagic Fisheries of the Western Pacific Region (Pelagics FMP) (WPFMC 1986, as amended).

⁵The Council also uses Western Pacific Regional Fishery Management Council (WPRFMC) in referring to itself, and when used, its publications are so attributed herein.

Currently, high seas squid jigging by U.S. vessels is managed under the High Seas Fishing Compliance Act (HSFCA). Vessels participating in that fishery carry HSFCA permits. As a result of a recent court decision (TIRN v. NMFS 2003), NMFS will bring all high seas fisheries authorized under the HSFCA into full compliance with provisions of the NEPA, the Marine Mammal Protection Act (MMPA) and the ESA. Although some of the fisheries permitted under the HSFCA are currently in compliance with those laws, others are not. Specifically, the U.S. Pacific Ocean high seas squid jigging fishery has not been assessed under NEPA, and further permitting of vessels in that fishery will not be done until requirements of NEPA are fulfilled. This EIS provides the NEPA analysis of a range of alternatives to monitor and manage that fishery.

The two existing small-boat squid jig fisheries in Hawaii are currently managed under the State of Hawaii's Commercial Catch Reporting System. Fishers are required to hold commercial fishing licenses and submit catch reports to the state. It is not anticipated that management of these fisheries would change upon implementation of any of the squid fishery management alternatives assessed in this EIS.

Objectives

The specific objectives for the two actions assessed in this environmental impact statement are taken from action documents of the WPFMC (WPRFMC 2004c, 2004d), where they were stated as follows.

Seabird Action Objective. "The primary objective of the seabird management action is the cost-effective further reduction of the potentially harmful effects of fishing by Hawaii-based longline vessels on the short-tailed albatross, but the overarching goal is to reduce the potentially harmful effects of fishing by Hawaii-based longline vessels on all seabirds."

Squid Action Objective. "The objective of the squid fishery management action is to establish appropriate mechanisms for the monitoring and management of pelagic squid harvest by domestic vessels, whether fishing under the authority of the MSA (Council fisheries) or the HSFCA (high seas fisheries)."

Because of the two authorities contained in the squid fishery management objective, two subobjectives for the western Pacific region were defined by the Council as follows:

Squid Action Sub-objective A. "To establish appropriate mechanisms for the monitoring and management of pelagic squid fishing activities by domestic vessels currently regarded as within the Western Pacific Fishery Management Council's authority (i.e., vessels fishing for squid or landing squid in ports within the U.S. Western Pacific EEZ)."

Squid Action Sub-objective B. "To establish appropriate mechanisms for the monitoring and management of pelagic squid fishing activities by domestic vessels not currently regarded as subject to any regional fishery council's jurisdiction (i.e., vessels fishing for squid outside of the U.S. EEZ and not making landings in U.S. ports)."

1.2 Management of Pelagic Fisheries under the Pelagics FMP

The Pelagics FMP establishes policies for fisheries for pelagic management unit species (PMUS) within or landing catches in ports in the EEZ of the United States(U.S.) surrounding the State of Hawaii, the Territories of American Samoa and Guam, the CNMI, and several islands and atolls that are U.S. possessions under direct federal jurisdiction (collectively referred to as the Pacific Remote Island Areas, or PRIA)⁶. These fisheries are managed through a process established by the MSA, which authorized Regional Fishery Management Councils and NMFS to develop management measures and implement regulations in order to ensure sustainable and socially optimal use of the nation's fishery resources. In the remainder of this section, the roles and responsibilities of NMFS and the Fishery Management Council, and the Pelagics FMP management regime are described.

1.2.1 NMFS

NMFS, an agency within NOAA under the U.S. Department of Commerce, is the federal agency responsible for stewardship of the nation's living marine resources and their habitats. NMFS is responsible for management, conservation and protection of living marine resources within the U.S.' EEZ (generally waters three to 200 nautical miles [nm] offshore).

In 2003, NMFS established a new regional office (Pacific Islands Regional Office - PIRO) and science center (Pacific Islands Fishery Science Center - PIFSC) in Honolulu to provide better stewardship of living marine resources within the region. The U.S. EEZ in the Pacific Islands Region is comprised of the shaded areas around the labeled islands shown in Figure 1.2-1. The total area of the managed EEZ in the Western Pacific Ocean is more than 1.5 million square nm, equal to the total EEZ of the entire U.S. mainland, including Alaska.

⁶The PRIA include Howland Island, Baker Island, Jarvis Island, Palmyra Island, Kingman Reef and Johnston Island, which are all National Wildlife Refuges under the jurisdiction of the U.S. Fish and Wildlife Service (USFWS), and Wake Atoll, jointly administered by the Department of the Interior's Office of Insular Affairs and the Department of Defense.

160°E 180° 160°W 140°W Hawaiian Islands 20°N Wake I Northern Mariana Johnstor Islands Atoll Palmyra I Howland 8 0° Bakerls Ameri can 20°S

Figure 1.2-1 The U.S. EEZ in the Pacific Islands Region.

1.2.2 The Magnuson-Stevens Act and the Fishery Management Council

The 1976 Fishery Conservation and Management Act (Public Law 94-265) (the Magnuson Act, and later, after amendments, the Magnuson-Stevens Act or MSA) established U.S. jurisdiction from the seaward boundary of the coastal states out to 200 nm for the purpose of managing fishery resources. Passage of the Magnuson Act was the first unilateral declaration of jurisdiction over a 200-nm zone by a major power. Presidential Proclamation 5030 of March 10, 1983, established the U.S. exclusive economic zone, declaring, "to the extent permitted by international law...sovereign rights for the purpose of exploring, exploiting, conserving and managing natural resources, both living and non-living, of the seabed and subsoil and the superjacent waters" in the 200-nm zone. The assertion of jurisdiction over the EEZ of the U.S. altered the legal basis for economic exploration and exploitation, scientific research, and protection of the environment by the U.S. The U.S. Congress confirmed presidential designation of the EEZ in 1986 amendments to the Magnuson Act.

The MSA is the principal federal statute that provides for the management of marine fisheries in the U.S. The MSA is arguably the most important fisheries legislation in U.S. history. The purposes of the MSA include conservation and management of the fishery resources of the U.S., support and encouragement of international fishery agreements, promotion of domestic

commercial and recreational fishing, preparation and implementation of FMPs, establishment of regional fishery management councils, development of fisheries which are underutilized or not utilized, and protection of essential fish habitat.

Using the tools provided by the MSA, NMFS assesses and predicts the status of fish stocks, ensures compliance with fisheries regulations and works to reduce wasteful fishing practices. The U.S. Congress revisits the authorization and provisions of the MSA periodically to determine whether the authority and mandates of the Act need modification to keep pace with the changing needs of the environment, the evolution of fishing practices, and the growing scientific body of knowledge about the oceans. The last reauthorization, known as the Sustainable Fisheries Act (SFA) (Public Law 104–297), occurred in 1996. That reauthorization resulted in sweeping changes in the way our nation's fisheries are managed. Increased emphasis was placed on reducing bycatch, halting overfishing, rebuilding fish stocks to sustainable levels, protecting marine habitats, and minimizing economic impacts on fishing communities.

The MSA created eight regional fishery management councils to advise NMFS on management issues and regulations. In the Pacific Islands Region, the WPFMC is responsible for the preparation and submission to the Secretary of Commerce fishery management plans (FMPs) and amendments for each fishery under its jurisdiction that requires conservation and management. NMFS approves, partially approves, or disapproves FMPs and amendments, and implements them through regulations. Fisheries in the Western Pacific Council's region range from small-scale artisanal fisheries within U.S. waters to large-scale commercial fisheries on the high seas. Fisheries in the region are managed under five FMPs. In addition to the Pelagics FMP, there are FMPs for Bottomfish and Seamount Groundfish, Coral Reef Ecosystems, Crustaceans, and Precious Corals.

The MSA requires that the best available scientific information be used for decision-making. The information provided in this document, as well as interpretations of that information, comes from peer-reviewed sources and from scientists at the USFWS's Pacific Region Office, NMFS' Pacific Islands Fisheries Science Center and Pacific Islands Regional Office. To the extent possible, this information complies with the Data Quality Act and NOAA standards (NOAA Information Quality Guidelines, September 30, 2002) that recognize information quality is composed of three elements - utility, integrity and objectivity. Central to the preparation of this EIS is objectivity which consists of two distinct elements: presentation and substance. The presentation element includes whether disseminated information is presented in an accurate, clear, complete, and unbiased manner and in a proper context. The substance element involves a focus on ensuring accurate, reliable, and unbiased information. The guidelines state that "[I]n a scientific, financial, or statistical context, the original and supporting data shall be generated, and the analytic results shall be developed, using sound statistical and research methods."

There are a number of issues inherent in the analysis of the affected environment, where issues of information quality and uncertainty might pertain. These include the use of different methodologies (and results) in terms of seabird interaction estimates, the effectiveness of various interaction avoidance measures and the interpretation of available seabird population data. In each case, this document discusses the strengths and weaknesses of available information and clearly states the methodologies and assumptions used in its analyses.

At the same time, however, the Federal government has recognized, "information quality comes at a cost. In this context, agencies are required to weigh the costs and the benefits of higher information quality in the development of information, and the level of quality to which the information disseminated will be held" (OMB Guidelines, pp. 8452-8453). One of the important potential costs in acquiring "perfect" information (which is never available), is the cost of delay in decision-making. While the precautionary principle suggests that decisions should be made in favor of the environmental amenity at risk (e.g., seabirds), this does not suggest that perfect information is required for any Preferred Alternative to proceed. In brief, it does suggest that caution be taken but that it not lead to paralysis until perfect information is available. This EIS has used the best available information and made a broad presentation of it. The process of public review of this document provides an opportunity for comment and challenge to this information, as well as for the provision of additional information.

1.2.3 The Pelagics FMP

The Pelagics FMP was implemented by NMFS on 23 March 1987 (52 Federal Register [FR] 5983, 27 February 1987). At the time the Pelagics FMP was drafted, the U.S. government was in the process of attempting to limit foreign longline fishing effort within the EEZ, and encourage more domestic harvesting and utilization of fishery resources. The Pelagics FMP replaced a previous management regime, the Preliminary Management Plan, that governed foreign longline fishing in the EEZ of the western Pacific region. Management measures originally put in place under the Pelagics FMP included the following:

- 1. Establish a triggering mechanism to institute new area closures for foreign longline vessels in the EEZ;
- 2. Eliminate existing quotas on foreign longline catch in the EEZ;
- 3. Require catch data and reporting of fishery interactions with protected species in the EEZ;
- 4. Prohibit the use of drift gill nets in the EEZ (except by domestic vessels fishing under an experimental permit); and
- 5. In cooperation with the State Department, establish a process to obtain data on the incidental catch of pelagic fishes in the EEZ by tuna pole-and-line and purse seine vessels.⁷

A subsequent rule effective November 26, 1990 (55 FR 42967, 25 October 1990) required that catch and effort data for PMUS be reported to the State of Hawaii, the Territory of American Samoa, and the Territory of Guam in compliance with the respective laws and regulations of each area.⁸

⁷The original Pelagics FMP contained no restrictions on foreign or domestic purse seine or pole-and-line tuna vessels, as tuna were not yet included as management unit species under the FMP. Amendment 6 to the FMP added tuna and related species to the FMP and closed the U.S. EEZ to foreign purse seine and pole-and-line tuna vessels. The U.S. tuna purse seine fleet in the Western Pacific Ocean is managed under the South Pacific Tuna Treaty (SPTT), although provisions of the Pelagics FMP do apply to those vessels when fishing within the U.S. EEZ.

⁸At that time, CNMI was not yet included in the management area of the Pelagics FMP.

The objectives of the plan were revised in 1991, and are summarized as follows:

- 1. Manage fisheries for PMUS to achieve optimum yield (OY);
- 2. Promote domestic harvest of and domestic fishery values associated with PMUS (e.g., by enhancing the opportunities for satisfying recreational fishing experiences, continuation of traditional fishing practices, and domestic commercial fishers to engage in profitable operations);
- 3. Diminish gear conflicts in the EEZ, particularly in areas of concentrated domestic fishing;
- 4. Improve the statistical base for conducting better stock assessments and fishery evaluations;
- 5. Promote the formation of regional/international arrangements for assessing and conserving PMUS throughout their range;
- 6. Preclude waste of PMUS associated with longline, purse seine, pole-and-line or other fishing operations; and
- 7. Promote domestic marketing of PMUS in American Samoa, Guam, Hawaii and The Northern Mariana Islands.

Over the ensuing years, the FMP has been amended a number of times. Table 1.2-1 summarizes amendments of and other changes to the Pelagics FMP.

Table 1.2-1 Amendments to the Pelagics FMP.

	AMENDMENTS						
No.	Effective Date	Action					
1	March 1, 1991	Provides: a) a measurable definition of recruitment overfishing for billfishes, mahimahi, wahoo and oceanic sharks; b) a revised definition of OY; and c) a revised set of objectives to conform with the above definitions and National Standards 1 and 2 of the MSA.					
2	May 26, 1991 (except "Protected Species Zone" - July 16, 1991)	(Preceded by an emergency rule.) Requires longline and transshipping vessel owners to obtain permits for their vessels, and requires vessel operators to maintain and submit to NMFS log book data on their fishing and transhipping activities. Extends the jurisdiction of the FMP to include the Northern Mariana Islands. Adds tuna to managed species after 1991. Establishes a "Protected Species Zone" in the Northwestern Hawaiian Islands (NWHI). Vessel operators intending to fish in this zone must notify NMFS in advance and carry an observer if requested. Requires notification of NMFS within 12 hours of return to port after any transshipment activity or landing.					
3	October 14, 1991	(Preceded by an emergency rule.) Prohibits longline fishing within 50 nm of certain NWHI as well as within corridors between those islands. Abrogated the requirement for observers established in Amendment 2. Required notification of NMFS when transiting the zone.					
4	October 10, 1991	(Preceded by an emergency moratorium and establishment of a control date for possible use in a limited entry program.) Extends until April 1994 a moratorium on the issuance of new permits to participate in the Hawaii-based longline fishery for PMUS. Provides a framework under which a vessel monitoring system (VMS) may be required.					

	I	
5 N	March 2, 1992	(Preceded by an emergency rule.) Prohibits longline fishing within 75 nm of the islands of Oahu, Kauai, Niihau, and Kaula, and within 50 nm of the islands of Hawaii, Maui, Kahoolawe, Lanai, and Molokai. A longline closure of approximately 50 nm also is implemented around Guam and its offshore banks. Framework procedures are established to adjust the size of the closed areas and modify criteria for exemptions.
	November 27, 1992	Brings FMP into consistency with the 1990 amendments to the MSA. Adds tuna and related species to the FMP. Extends closed areas and requirements applicable to foreign longline vessels to foreign baitboat and purse seine vessels.
7 J	June 24, 1994	Establishes a limited entry program for the Hawaii longline fishery for pelagic species. Includes broad framework measures for more efficient management of the fishery.
8 F	February 3, 1999	Implements provisions of the SFA for essential fish habitat and the definitions of fishing community for Western Pacific island areas except Hawaii.
8 (Amended)	July 3, 2003	Implements provisions of the SFA for bycatch, overfishing definitions and control rules, and definitions of fishing communities for Hawaii.
9 I:	In Revision	(Draft Amendment establishing limits on shark landings was rendered moot by the Shark Finning Prohibition Act.)
10 N	March 25, 2004	Implements parts of the Coral Reef Ecosystems (CRE) FMP. Prohibits fishing for PMUS in CRE FMP no-take marine protected areas (MPAs). Amends the list of PMUS.
ro y C	Approved, regulations not yet promulgated. Control date is March 21, 2002	Establishes a limited entry program for the American Samoa longline fishery.
		FRAMEWORK AMENDMENTS
No.	Effective Date	Action
1 N	March 1, 2002	Prohibits vessels greater than 50 feet in overall length from fishing for PMUS between 3 and 59 nm around the islands of American Samoa.
2 J	June 13, 2002	(Preceded by an emergency rule.) Requires Hawaii longline limited entry vessels operating north of 23° N to employ a line-setting machine with weighted branch lines (45 gram [g] minimum) or use basket style gear, and to use thawed, blue-dyed bait and strategic offal discards during setting and hauling longlines. Also requires certain seabird handling techniques and attendance by owners and operators at an annual protected species workshop conduced by NMFS. (Codifies Terms and Conditions of the U.S. Fish and Wildlife Service [USFWS] BiOp of November 28, 2000; USFWS 2000.)
		REGULATORY AMENDMENTS

1	June 12, 2002	Implements the Reasonable and Prudent Alternative (RPA) of NMFS' March 29, 2001 BiOp intended to reduce interactions between endangered and threatened sea turtles and pelagic fishing gear and to mitigate harmful effects of interactions that occur. Prohibits targeting of swordfish north of the equator by longline vessels, closes all fishing to longline vessels during April and May in waters south of the Hawaiian Islands (from 15°N to the equator and from 145°W to 180°), prohibits the landing or possessing of more than 10 swordfish per trip by longline (limited entry or general) vessels and possession of light sticks. Vessels with a freeboard more than 3 feet (ft) must carry line clippers, dip nets, and wire or bolt cutters. Float lines must be longer than 20 meters (m). If monofilament longline is used, must have at least 15 branch lines between floats. If basket-style gear is used, must have at least 10 branch lines between floats. Deepest point of main longline between any 2 floats must be 100 m. Vessel operators must attend and be certified for a protected species workshop.
2	October 4, 2002	Establishes permit and reporting requirements for any U.S. fishing vessel that uses troll or handline gear to harvest PMUS in the EEZ around the PRIA.
3	April 2, 2004	Reopens the swordfish-directed component of the Hawaii-based longline fishery and eliminates a seasonal closure for longline fishing in an area south of the Hawaiian Islands. For swordfish fishing, establishes required types of hooks and bait; annual fleet-wide limits on interactions with leatherback and loggerhead sea turtles; annual fleet-wide limit on fishing effort; and other interaction avoidance measures, including the necessity for setting at night when fishing above 23°N.

Source: www.wpcouncil.org.

Pelagic species are free-swimming, open-ocean animals. Although they are usually found far from land, there are occasions when some species such as yellowfin tuna and billfish come close to islands and land masses during spawning events. Also, it is becoming increasingly apparent that underwater features such as sea mounts exert an important influence on the distribution of some species. Some species are highly migratory with genetic exchange occurring over the entire breadth of the Pacific Ocean, while others may be organized into regional sub-populations with more limited genetic exchange. Species managed under the Pelagics FMP include tunas, billfish, pelagic sharks and others (69 FR 8336, February 24, 2004) (Table 1.2-2).

Table 1.2-2 Pelagic Management Unit Species.

English Common Name	Scientific Name	Hawaiian or HI local	Samoan or AS local	Chamorroan or Guam local	S. Carolinian or NMI local	N. Carolinian or NMI local	Essential Fish Habitat (EFH) Designation		
Billfish	Billfish								
Black marlin	Makaira indica						Tropical, Marketable		
Indo-Pacific blue marlin	Makaira mazara	Aʻu, Kajiki	Sa'ula	Batto'	Taghalaar	Taghalaar	Tropical, Marketable		
Sailfish	Istiophorus platypterus	A'u lepe	Sa'ula	Guihan layak	Taghalaar	Taghalaar	Tropical, Marketable		
Shortbill spearfish	Tetrapturus angustirostris	Hebi	Sa'ula	Spearfish			Tropical, Marketable		
Striped marlin	Tetrapturus audax	Nairagi					Temperate, Marketable		
Swordfish	Xiphias gladius	Aʻu kū, Broadbill, Shutome	Sa'ula malie	Swordfish	Taghalaar	Taghalaar	Temperate, Marketable		
Tunas	•				•		•		
Albacore	Thunnus alalunga	'Ahi palaha, Tombo	Apakoa	Albacore	Angaraap	Hangaraap	Temperate, Marketable		
Bigeye	Thunnus obesus	'Ahi po'onui, Mabachi	Asiasi, Toʻuo	Bigeye tuna	Toghu, Sangir	Toghu, Sangir	Temperate, Marketable		
Kawakawa	Euthynnus affinis	Kawakawa	Atualo, Kavalau	Kawakawa	Asilay	Hailuway	Tropical, Marketable		
Northern bluefin	Thunnus thynnus	Maguro					Temperate, Marketable		
Skipjack	Katsuwonus pelamis	Aku	Atu, Faolua, Gaʻoga	Bunita	Angaraap	Hangaraap	Tropical, Marketable		
Yellowfin	Thunnus albacares	'Ahi shibi	Asiasi, Toʻuo	'Ahi, Shibi	Yellowfin tuna	Toghu	Tropical, Marketable		
Other tuna relatives	Auxis spp., Scomber spp., Allothunus spp.	Keʻo keʻo, Saba, various	various	various	various	various	Tropical, Marketable		

English Common Name	Scientific Name	Hawaiian or HI local	Samoan or AS local	Chamorroan or Guam local	S. Carolinian or NMI local	N. Carolinian or NMI local	Essential Fish Habitat (EFH) Designation
Miscellaneous PMUS	5	•					
Mahimahi (dolphinfishes)	Coryphaena spp.	Mahimahi	Masimasi	Botague	Sopor	Habwur	Tropical, Marketable
Moonfish	Lampris spp.	Opah	Koko		Ligehrigher	Ligehrigher	Tropical, Marketable
Oilfish	Family Gempylidae	Walu, Escolar	Palu talatala		Tekiniipek	Tekiniipek	Non-marketable ¹
Pomfret	Family Bramidae	Monchong	Manifi moana				Temperate, Marketable
Wahoo	Acanthocybium solandri	Ono	Paala	Toson	Ngaal	Ngaal	Tropical, Marketable
Sharks		•					
Bigeye thresher	Alopias superciliosus						
Blue	Prionace glauca						
Common thresher	Alopias vulpinus						
Longfin mako	Isurus paucus						
Oceanic whitetip	Carcharhinus longimanus						
Pelagic thresher	Alopias pelagicus	Mano	Malie	Halu'u	Paaw	Paaw	
Salmon	Lamna ditropis						
Shortfin mako	Isurus oxyrinchus						
Silky	Carcharhinus falciformis		on undated since their add				

Increasingly marketed in recent years, but EFH designations have not been updated since their adoption. Source: WPRFMC 2004a.

1.2.4 NEPA and ESA Compliance for the Pelagics FMP

Regulations implementing the Pelagics FMP and its amendments have evolved in response to Council initiatives, court decisions, NEPA documents and BiOps. This section first describes the relevant regulatory requirements and applicable guidelines for NEPA compliance, and then chronicles the evolution of the Pelagics FMP management regime.

1.2.4.1 NEPA and Council on Environmental Quality Regulations

NEPA, signed into law in 1970 (42 U.S. Code [U.S.C.] 4321 et seq.), has several purposes. As stated in Section 2 of its preamble, the purposes of NEPA are: "to declare a national policy which will encourage productive and enjoyable harmony between man and his environment, to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man, to enrich the understanding of the ecological systems and natural resources important to the Nation, and to establish a Council on Environmental Quality." The Council on Environmental Quality (CEQ) coordinates federal environmental efforts and works closely with agencies and other White House offices in the development of environmental policies and initiatives.

Federal fishery management actions subject to NEPA requirements include the approval of FMPs and FMP implementing regulations. NEPA compliance requires preparation of either an EIS or supplemental EIS for major fishery management actions that significantly affect the quality of the human environment, or an environmental assessment (EA) for fishery management actions that will not significantly affect the human environment. If an EA does not support a finding of no significant impact, then an EIS must be prepared. In addition to NEPA implementing regulations (at 40 CFR 1500-1508), NEPA compliance by fisheries management actions is guided by NOAA Administrative Order 216-6, described below.

1.2.4.2 NOAA's NEPA Guidelines

Under CEQ regulations (40 CFR 1501.4) federal agencies are charged with developing and implementing procedures to supplement the CEQ regulations (40 CFR 1507.3). The agency's procedures provide guidance on whether to prepare an EA or an EIS. NOAA's Administrative Order 216-6, "Environmental Review Procedures for Implementing the NEPA," provides this guidance for NOAA actions. Section 5.01.b.1(b) of the Order requires the agency to "consider the nature and intensity of the potential environmental consequences of the action in relation to the criteria and guidance provided in this Order to determine whether the action requires an EIS, EA, or CE [categorical exclusion]."

Section 6.01 states that "...EISs must be prepared for..." major Federal actions" significantly affecting the quality of the human environment." It goes on to state that "[a] significant effect includes both beneficial and adverse effects." The section further defines the key terms used in determining significance:

• "Major Federal action" includes actions with effects that may be major and which are potentially subject to NOAA's control and responsibility. "Actions include: ...new or revised agency rules, regulations, plans, policies, or procedures...."

- "Significant" requires consideration of both context and intensity. Context means that significance of an action must be analyzed with respect to society as a whole, the affected region and interests, and the locality. Both short- and long-term effects are relevant. Intensity refers to the severity of the impact. The following factors should be considered in evaluating intensity (40 CFR 1508.27):
 - 1. Impacts may be both beneficial and adverse; a significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial;
 - 2. Degree to which public health or safety is affected;
 - 3. Unique characteristics of the geographic area;
 - 4. Degree to which effects on the human environment are likely to be highly controversial;
 - 5. Degree to which effects are highly uncertain or involve unique or unknown risks;
 - 6. Degree to which the action establishes a precedent for future actions with significant effects or represents a decision in principle about a future consideration:
 - 7. Individually insignificant but cumulatively significant impacts;
 - 8. Degree to which the action adversely affects entities listed in or eligible for listing in the *National Register of Historic Places*, or may cause loss or destruction of significant scientific, cultural, or historic resources;
 - 9. Degree to which endangered or threatened species, or their critical habitat as defined under the Endangered Species Act of 1973, are adversely affected;
 - 10. Whether a violation of Federal, state, or local law for environmental protection is threatened; and
 - 11. Whether a Federal action may result in the introduction or spread of a nonindigenous species.
- "Affecting" means will or may have an effect (40 CFR 1508.3).
- "Effects" include direct, indirect, or cumulative effects of an ecological, aesthetic, historic, cultural, economic, social, or health nature (40 CFR 1508.8).
- "Human environment" includes the relationship of people with the natural and physical environment. Each EA, EIS, or supplemental EIS (SEIS) must discuss interrelated economic, social, and natural or physical environmental effects.

1.2.4.3 ESA Section 7 Requirements

Section 7(a)(2) of the ESA (16 U.S.C. 1531 et seq.) requires that each federal agency shall ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of critical habitat of such species. When the action of a federal agency may affect a listed species or designated critical habitat, that agency is required to consult with either NMFS or the U.S. Fish and Wildlife Service (USFWS), depending upon the species that may be affected. For sea turtles, NMFS is the lead agency when the action affects sea turtles in the ocean and the USFWS is the lead agency when the action affects sea turtles on land (i.e., nests); for seabirds, the USFWS is the lead agency. For fishery management actions in the western Pacific region, NMFS Pacific Islands Region, Sustainable Fisheries Division, is the action agency. For actions that may affect sea turtles, the consulting agency is NMFS, Office of Protected Resources. For actions that may affect threatened or endangered seabirds, the consulting agency is USFWS, Pacific Islands Fish and Wildlife Office.

Authorization by NMFS of fisheries under a FMP requires appropriate consultation, formal or informal, under section 7 of the ESA. Informal consultation is sufficient when the consulting agencies agree that the action is not likely to adversely affect a listed species or critical habitat. If an action may adversely affect a listed species or critical habitat, a formal consultation resulting in a BiOp is required. The formal consultation process must result in a BiOp reaching either a jeopardy or no jeopardy to listed species (or adverse or no adverse modification of critical habitat) finding. If a fishery is likely to adversely affect endangered or threatened species in the course of its operations, the BiOp will contain an Incidental Take Statement⁹, authorizing a limited amount of and type of take that may occur in the fishery each year before reinitiation of consultation is required. A BiOp may contain "Reasonable and Prudent Alternatives," actions that can be implemented to avoid the likelihood of jeopardizing the continued existence of listed species or the destruction or adverse modification of designated critical habitat, or "Reasonable and Prudent Measures," actions necessary or appropriate to minimize the impacts, i.e., amount or extent, of incidental take. A BiOp may also contain non-discretionary "Terms and Conditions" that must be implemented to control activities of the fishery, and may also contain discretionary "Conservation Recommendations" that the action agency may implement to benefit conservation objectives for listed species or critical habitat.

Consultations between NMFS and the USFWS pursuant to section 7 of the ESA have produced BiOps that have shaped the current management regime for fisheries conducted under the Pelagics FMP. In particular, regulations controlling conduct of the Hawaii-based longline fishery have implemented a number of measures required by both NMFS and USFWS BiOps.

1.2.4.4 Pelagics FMP NEPA Documents and BiOps

NEPA compliance for the original Pelagics FMP and many of its subsequent amendments was achieved through the completion of EAs. The FEIS for Pelagic Fisheries of the Western Pacific Region (Pelagics FEIS; NMFS 2001a) was the first comprehensive assessment of all of the fisheries managed under the Pelagics FMP. Since then, several amendments to the FMP were accompanied by EAs, and an SEIS was prepared for the actions surrounding re-establishment of a Hawaii-based, shallow-set swordfish fishery (WPRFMC 2004b). A chronology of the events surrounding production of these two EISs follows.

In 1999, litigation was initiated challenging NMFS' determination under section 7 of the ESA that continued conduct of the Hawaii-based longline fishery was not likely to jeopardize the existence of leatherback (*Dermochelys coriacea*), loggerhead (*Caretta caretta*), olive ridley (*Lepidochelys olivacea*), hawksbill (*Eretmochelys imbricata*) or green (*Chelonia mydas*) turtles, and that an EIS should have been prepared. On October 6, 1999, NMFS published a Notice of Intent (NOI) to prepare an EIS (64 FR 54272). Against a backdrop of injunctions, amended court orders and emergency rules, NMFS completed the FEIS for the Pelagics FMP on March 30, 2001.

⁹Take, under the ESA, means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct. [ESA §3(19)] Incidental take is take of listed fish or wildlife species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by a Federal agency or applicant [50 CFR §402.02]. Take is defined differently under other authorities.

In the meantime, a formal biological consultation under section 7 of the ESA to determine the effects of the Hawaii-based longline fleet on the short-tailed albatross was initiated on April 8, 1999, and fully considered the then-ongoing Council studies of seabird interaction avoidance measures and preferred strategies to reduce interactions with seabirds. This consultation resulted in the publication of a BiOp by the USFWS on November 28, 2000 (USFWS 2000). The BiOp concluded that the Hawaii-based longline fishery may adversely affect short-tailed albatross but is not likely to jeopardize the continued existence of the species. The BiOp contained several Terms and Conditions that were implemented by NMFS through an emergency rule, which also included sea turtle mitigation measures (66 FR 31561, June 12, 2001). On December 10, 2001, NMFS extended that emergency interim rule for another 180 days, through June 8, 2002 (66 FR 63630). At that time, the Hawaii-based longline fishery was authorized a take of 2.2 short-tailed albatross per year (estimated by the USFWS to total 15 birds over the seven-year length of the consultation period), and participants were required to use several seabird interaction avoidance methods (Table 1.2-3).

The Preferred Alternative in the 2001 FEIS (NMFS 2001a) reflected the Reasonable and Prudent Alternative (RPA) of a March 29, 2001 NMFS BiOp (NMFS 2001b) that concluded that the Hawaii-based longline fishery jeopardized the continued existence of leatherback and loggerhead sea turtles. Regulations implementing the Preferred Alternative became effective on June 12, 2002 (67 FR 40232). Measures implemented included a ban on the use of shallow-set swordfish longline fishing gear north of the equator and a seasonal area closure from 15°N to the equator and from 145°W to 180° during April and May for any longline vessel fishing under the authority of the Pelagics FMP.

On October 18, 2001, the USFWS amended its short-tailed albatross BiOp to include basket-style, tarred mainline gear as an alternative to monofilament gear set with a line-setting machine and weighted branch lines. A final rule implementing seabird rules for the Hawaii-based fishery and allowing the deployment of basket-style, tarred mainline gear, was published on May 14, 2002 (67 FR 34408). The final rule implemented only those provisions of the BiOp pertaining to deep-sets, as the shallow-set component of the fishery was closed under separate rulemaking in compliance with the March 29, 2001 NMFS BiOp (NMFS 2001b) on the effects of the fishery on sea turtles.

On December 12, 2001, NMFS reinitiated consultation on the effects of pelagic fisheries on sea turtles of the region. This reinitiation was based on new information that could improve the agency's ability to quantify and evaluate the effects of the fishery on listed sea turtle populations. At the conclusion of the reconsultation, NMFS issued a BiOp (November 15, 2002) (NMFS 2002a), which maintained the June 12, 2002 regulations including the ban on shallow-set longlining north of the equator and the April-May southern area closure for all Hawaii-based longlining.

As a consequence of the closure of the swordfish sector of the fishery, on November 18, 2002, the USFWS revised the short-tailed albatross BiOp to reflect the changes in the fishery due to the final sea turtle rules (USFWS 2002). They amended the Incidental Take Statement for the

¹⁰A single vessel was employing this type of gear, but has since left the fleet.

Hawaii-based longline fishery from 2.2 short-tailed albatross per year to one bird per year and required that 5% of all longline trips north of 23°N latitude carry an observer whose primary duty was to observe seabird interactions. Modifications were also made to the seabird interaction avoidance requirements (Table 1.2-3).

Table 1.2-3 Seabird Measures Proposed by WPFMC Action and Those Contained in the USFWS Biological Opinions on the Effects of the Hawaii Longline Fishery on the Short-tailed Albatross.

Seabird Measures	Council's Action (09/30/99)	USFWS Short-tailed Albatross Biological Opinion/Terms and Conditions (11/28/00)		USFWS Short- tailed Albatross Biological Opinion/Terms and Conditions: Revised (10/18/01 and 11/18/02)	USFWS Short- tailed Albatross Biological Opinion/ Terms and Conditions (10/8/04)
	North of 25°N	North o	of 23°N	North of 23°N	North of 23°N
A. Interaction avoidance measures	All longliners pick at least two from list	Tuna (deep) set	¹ Swordfish /Mixed (shallow) set	Tuna (deep) set	Swordfish (shallow) set
1. Thawed, blue- dyed bait		Required	Required	Required	Required
2. Strategic Offal Discard		Required	Required	Required	Required
3. Line-Setting machine w/weighted branch lines (minimum wt. = 45 gm); or employ basket-style longline gear ²		Required	Not Required (Optional)	Required	Not Required (Optional)
4. Night-setting		Not Required (Optional)	Required	Not Required (Optional)	Required
5. Towed deterrent (buoy/tori line)		Not Required (Optional)	Not Required (Optional)	Not Required (Optional)	Not Required (Optional)
6. Weighted branch lines (min wt =45 gm)		Not Required (Optional)	Not Required (Optional)	Not Required (Optional)	Not Required (Optional)

Seabird Measures	Council's Action (09/30/99)	USFWS Short-tailed Albatross Biological Opinion/Terms and Conditions (11/28/00)	USFWS Short- tailed Albatross Biological Opinion/Terms and Conditions: Revised (10/18/01 and 11/18/02)	USFWS Short- tailed Albatross Biological Opinion/ Terms and Conditions (10/8/04)
	North of 25°N	North of 23°N	North of 23°N	North of 23°N
B. Careful handling of hooked seabirds	Required for all seabirds	Vessel operators must contact NMFS immediately if they have a hooked/ entangled short-tailed albatross. Specific handling guidelines.	Vessel operators must contact NMFS immediately if they have a hooked/ entangled short- tailed albatross. Specific handling guidelines.	Vessel operators must contact NMFS immediately if they have a hooked/ entangled short- tailed albatross.
C. Annual Protected Species Workshops	Required	Required	Required	Required

¹One of the June 12, 2001, emergency measures to reduce sea turtle hookings prohibited the targeting of swordfish (i.e., shallow-setting) by the Hawaii-based longline fleet.

In June 2003, the Council began reviewing potential modifications to the southern area closure to determine whether modifications could be made to support the economic viability of the fleet without jeopardizing sea turtles. It was anticipated that a regulatory amendment to the FMP modifying the closure could be prepared and implemented prior to the 2004 seasonal closure.

However, in a ruling on August 31, 2003, the District Court vacated the 2002 sea turtle BiOp prepared by NMFS (NMFS 2002a) and the fishery regulations promulgated on June 12, 2002. This had the effect of removing the ban on shallow-setting by the Hawaii-based longline fishery, but also removed the protection afforded fishermen from prosecution under the ESA by the Incidental Take Statement for listed sea turtles contained in the invalidated BiOp. Subsequently, on September 23, 2003, the Council voted to recommend to NMFS an emergency action that would allow a model swordfish longline fishery north of the equator at 75% of historic (1994-1998 annual average) swordfish levels of effort (sets). Implementation of the seabird interaction avoidance measures initially established in the USFWS 2000 BiOp (USFWS 2000) for the shallow-set sector of the fleet was a part of the proposed emergency measure.

On October 6, 2003, the Federal Court stayed the implementation of the August 31, 2003 order until April 1, 2004 to allow NMFS time to develop a new BiOp and hopefully render a more permanent solution than interim or emergency measures. NMFS requested the Council to develop and transmit a complete long-term rule package by December 1, 2003 so that it could be processed and implemented by April 1, 2004. On October 17, 2003, the Council and NMFS

²The 10/18/01 USFWS BiOp allowed basket-style, tarred mainline gear as an alternative to monofilament gear set with a line-setting machine and weighted branch lines.

announced their intent to prepare an SEIS evaluating long-term management measures for the fishery, provided notice of scoping meetings, and requested comments (68 FR 59771).

On December 3, 2003 (68 FR 67640), the Council and NMFS published a Supplemental NOI to prepare the SEIS, along with public notice of a compressed schedule under alternative procedures approved by the CEQ. The accelerated schedule was necessary to avoid a lapse in appropriate management measures after April 1, 2004. It was noted at that time that a subsequent NEPA document would be prepared to address other management issues identified in the October 17, 2003 NOI.

The Council's recommended long-term alternative was that NMFS allow 2,120 shallow-sets (50% of historic [1994-98] effort) to be made annually, to model the use of certain new technologies shown to reduce and mitigate interactions with sea turtles, to eliminate time/area closures in the fishery, and to continue funding the international conservation measures designed to conserve leatherback and loggerhead sea turtles in their nesting and near-shore habitats. 11 Options were considered for participation in and closure of the fishery if turtle takes reached a preestablished "hard limit." The Council's preferred participation option was to divide the allowable effort equally among interested permit holders. The preferred option for the "hard limit" was to close the swordfish fishery each calendar year when the fishery's total interactions with leatherback or loggerhead sea turtles reached the level established in the Incidental Take Statement. 12 The swordfish sector of the fishery would have 100% observer coverage and would implement the seabird interaction avoidance measures initially established in the USFWS 2000 BiOp (USFWS 2000) (i.e, thawed, blue-dyed bait; strategic offal discard; handling measures for hooked seabirds; night-setting; and attendance at protected species workshops). The swordfish and tuna sectors of the fishery would be treated as two separate fisheries for the purposes of ESA section 7 Incidental Take Statements.

On February 14, 2004, NMFS' Office of Protected Resources completed its consultation on the Preferred Alternative. The resulting BiOp (NMFS 2004a) concluded that the Preferred Alternative, including three measures that were expected to be implemented through rulemaking within the subsequent year, was not likely to jeopardize the continued existence of sea turtles or other listed species. The future measures included: 1) a requirement that owners and operators of vessels holding general longline permits annually attend a NMFS-conducted protected species workshop; 2) that vessels permitted under a general longline permit and having a freeboard of more than three feet carry line clippers, bolt cutters and dip nets to facilitate removing gear from turtles, and follow approved handling, resuscitation and release methods; and 3) that vessels permitted under a general longline permit and having a freeboard of less than three feet carry line clippers and bolt cutters to facilitate removing gear from turtles, and follow approved handling,

¹¹The international conservation projects include protection of leatherback nests at War-mon Beach, Papua; reduction of harpooning adult leatherbacks in the Western Papua coastal foraging grounds; protection of leatherback nests at Kamiali, Papua New Guinea; reduction of mortality in the halibut gillnet fishery off Baja, Mexico; and, protection of loggerhead nests at two beaches in Japan.

¹²The Incidental Take Statement in the BiOp for this action (NMFS 2004a) established the expected annual number of turtles captured at 16 for leatherbacks and 17 for loggerheads.

resuscitation and release methods. These three measures were initially put into place by the June 12, 2002 regulations that were vacated by court order on April 1, 2004.

NMFS' 2004 BiOp (NMFS 2004a) contains a series of non-discretionary Terms and Conditions, including:

- 1. Continuation of the observer program for the Hawaii-based longline fleet with a minimum average coverage of 20% in the deep-set fishery and 100% in the shallow-set fishery;
- 2. Establishment, where feasible, of an observer program for the American Samoa longline fishery; and
- 3. Continuation of the protected species workshops.

In addition, a number of requirements for handling and removing gear from hooked turtles were established. Final rules implementing the long-term measures were published on April 2, 2004 (69 FR 17329). This final rule:

- 1. Establishes an annual effort limit on the amount of shallow-set longline fishing effort north of the equator that may be collectively exerted by Hawaii-based longline vessels (2,120 shallow-sets per year);
- 2. Divides and distributes this shallow-set annual effort limit each calendar year in equal portions (in the form of transferable single-set certificates valid for a single calendar year) to all holders of Hawaii longline limited entry permits (according to the number of permits held) that provide written notice to NMFS no later than November 1 prior to the start of the calendar year of their interest in receiving such certificates;
- 3. Prohibits any Hawaii-based longline vessel from making more shallow-sets north of the equator during a trip than the number of valid shallow-set certificates on board the vessel;
- 4. Requires that operators of Hawaii-based longline vessels submit to the Regional Administrator within 72 hours of each landing of pelagic management unit species, with the logbooks, one valid shallow-set certificate for every shallow-set made north of the equator during the trip;
- 5. Requires that Hawaii-based longline vessels, when making shallow-sets north of the equator, use only circle hooks sized 18/0 or larger with a 10° offset;
- 6. Requires that Hawaii-based longline vessels, when making shallow-sets north of the equator, use only mackerel-type bait;
- 7. Establishes annual limits on the numbers of interactions between leatherback and loggerhead sea turtles and Hawaii-based longline vessels while engaged in shallow-setting, set at 16 and 17 for leatherback and loggerhead sea turtles, respectively (the limits are equal to the annual number of turtles expected to be captured for the respective species in the shallow-set component of the Hawaii-based fishery, as established in the BiOp issued by NMFS pursuant to section 7 of the ESA);
- 8. Establishes a procedure for closing the shallow-setting component of the Hawaii-based longline fishery for the remainder of the calendar year when either of the two limits is reached, after giving at least one (1) week advanced notice of such closure to all holders of Hawaii longline limited entry permits (the numbers of interactions will be monitored with respect to the limits using year-to-date estimates derived from data recorded by NMFS vessel observers);
- 9. Requires that operators of Hawaii-based longline vessels notify the Regional Administrator in advance of every trip whether the longline sets made during the trip will

- involve shallow-setting or deep-setting and require that Hawaii-based longline vessels make sets only of the type declared (i.e., shallow-sets or deep-sets);
- 10. Requires that operators of Hawaii-based longline vessels carry and use NMFS-approved de-hooking devices; and
- 11. Requires that Hawaii-based longline vessels, when making shallow-sets north of 23°N latitude, start and complete the deployment of longline gear during the nighttime (specifically, starting no earlier than one hour after local sunset and finishing no later than local sunrise).

Because of the 2001 closure of the shallow-set sector of the Hawaii-based longline fishery, the USFWS's 2002 BiOp (USFWS 2002) on the effects of the fishery on the short-tailed albatross considered only the deep-set, tuna-targeting, sector of the fishery. With the reauthorization of the shallow-set sector of the fishery in 2004, consultation was reinitiated for that sector of the fishery, with the Terms and Conditions established in the 2002 BiOp remaining in effect for the deep-set sector of the fishery. The conclusion of the 2004 BiOp on the effects of the shallow-set sector of the fishery (USFWS 2004a) is that it may result in the take (mortality) of one short-tailed albatross per year, which will not jeopardize the continued existence of the species. (This is in addition to the estimated incidental take of one short-tailed albatross per year in the deep-set sector of the fishery.) The Incidental Take Statement contains three Reasonable and Prudent Measures and eleven Terms and Conditions which implement the measures. They are listed as they appear in the BiOp as follows:

- I. Minimize Attraction of Short-tailed Albatross to Fishing Gear Used by the Hawaii-based Longline Fishery.
 - I.A. Side-setting and Implementation Timeframe. The interaction avoidance measures described in the November 28, 2000 BiOp (Thawed, blue-dyed bait; strategic offal discard; and night-setting) remain in place. In preparation for potentially replacing some or all of these interaction avoidance measures, a process for evaluating the performance of side-setting is outlined, as follows.
 - I.A.(1). To the greatest extent possible NMFS will place observers on deep-set vessels that voluntarily implement side-setting to document procedures and seabird takes. NMFS will encourage vessels targeting swordfish to side-set, and the following specifications are recommended:
 - Weights: attach a 60 g swivel within 1 m (3 ft) of the hook on each branch line;
 - Set gear amidships as far forward from the stern as possible;
 - Deploy a bird-scaring curtain between the setting position and the stern;
 - Throw baited hooks forward as close to the vessel hull as possible:
 - Clip deployed branch lines to the mainline the moment that the vessel passes the baited hook to minimize tension in the branch line, which would cause the baited hook to be pulled towards the sea surface.
 - I.A.(2). NMFS will assess the resulting observer data on the performance of sidesetting and compare it with observer data and other information on the performance of night-setting and thawed and blue-dyed bait in the shallow-set longline fishery and with data on the effectiveness of other seabird deterrents.

- I.A.(3). Based on the results of this assessment, NMFS will develop a timeline for initial implementation and monitoring of side-setting, or other equally or more effective measures, and submit it to the USFWS by November 1, 2004.
- I.A.(4). By August 30, 2005, NMFS will implement and monitor side-setting, or another appropriate seabird deterrent or combination of deterrents that the USFWS agrees is at least as effective as side-setting in reducing the risk to the short-tailed albatross, in the shallow-set Hawaii-based longline fishery.
- I.B. Additional Seabird Deterrents. Until new regulations for seabird deterrent use are promulgated, vessels targeting swordfish in the Hawaii-based longline fishery are not prevented from using the following deterrents in addition to those currently required:
 - I.B.(1). Side-setting, best practiced according to the above specifications.
 - I.B.(2). Line-setting machine with weighted branch lines (longline set faster than the vessel's speed).
 - I.B.(3). Weighted branch lines. At least 45 g of weight may be attached to branch lines within 1 m of each baited hook.
 - I.B.(4). Towed deterrents. A line with suspended streamers (tori line) or a buoy that conforms to WPFMC/NMFS standards may be deployed when the longline is being set and hauled. Tori lines or towed deterrents should be constructed and employed according to the specifications provided in Garcia and Associates (1999; Appendix A-9).
- II. Monitor the Level of Take and Measures to Minimize Take.
 - II.A. Annual Reporting. NMFS will report annually the observed and estimated total number of interactions of Laysan and black-footed albatross in the shallow-set sector of the Hawaii-based longline fishery, observed take of short-tailed albatross, and any observations of short-tailed albatross. NMFS will also evaluate and report on the effectiveness of the seabird deterrent regime on an annual basis. An interim report on the assessment of side-setting effectiveness on vessels voluntarily using this deterrent will be due November 1, 2004.¹³
 - II.B. Observer Coverage. 100% observer coverage of the shallow-set sector of the fishery is required. Observers will be trained in seabird identification and handling. Observers will monitor the first hour of each set and record seabird sightings and interactions with longline gear, unless or until darkness precludes identification of seabird species. Observers will document seabird sightings and interactions during every haulback of longline gear in its entirety. Short-tailed albatross, if sighted, will be observed for as long as the bird is visible.
 - II.C. Observer Duties. On all shallow-set trips, observers will collect data on sightings and behavior of short-tailed, Laysan, and black-footed albatrosses and seabird interactions with longline gear during the first hour of setting operations, or until darkness prevents the observer from distinguishing between seabird species. Observers will conduct two "scan counts" within five-minute windows to count and identify seabirds that are visible from the vessel: one at the beginning of the

¹³This assessment was completed based on the report by Gilman (2004) and submitted as required on November 1, 2004. It was revised and resubmitted on November 5, 2004.

- hour and one another 30 minutes later. Observers will record seabird sightings and behavior in the vicinity of longline gear throughout the haulback, and conduct scan counts in five-minute windows at the top of every hour during the haul unless or until darkness precludes identification of seabird species.
- II.D. Observations of Short-tailed Albatross. If an observer sights a short-tailed albatross, NMFS will make arrangements for the USFWS to interview the observer within seven days of the vessels's return to port, and review relevant information. If a short-tailed albatross is taken, the observer will notify NMFS and NMFS will immediately notify the USFWS. A report to the USFWS will be transmitted within 30 days of the event or 10 days of the return of the vessel to port, whichever comes first.
- II.E. Quarterly Reports NMFS Observer Program. Written summaries of observer data on trip statistics and protected species interactions will continue to be submitted to the USFWS.
- III. Ensure survivability of injured short-tailed albatrosses.
 - III.A. Handling and Rehabilitation of Injured Short-tailed Albatross. NMFS will advise fishers and observers that every reasonable effort must be made to save injured short-tailed albatross. (Handling guidelines are provided in the BiOp and summarized elsewhere in this EIS.)
 - III.B. Disposition of Dead Short-tailed Albatross. Any dead short-tailed albatross must be tagged with specified information, immediately frozen and turned over to NMFS or the USFWS as soon as possible.
 - III.C. Annual Workshops. NMFS will continue to conduct annual workshops to inform fishers of the risk of short-tailed albatross takes in the Hawaii-based longline fishery.
 - III.D. Albatross Species Identification Card. NMFS will continue to produce and distribute the plastic-coated, weatherproof, cards that illustrate albatross species for identification purposes. They should be translated into Korean and Vietnamese and distributed to those fishers whose first language is either Korean or Vietnamese.

The USFWS 2004 BiOp for the shallow-set sector of the fishery also contains four discretionary Conservation Recommendations, which are summarized as follows.

- 1. NMFS should coordinate with the governments of Japan, Korea, Taiwan, and other Pacific fishing nations the collection of fishery effort and seabird injury and mortality information from their various fisheries. Of particular interest are rates of seabird interactions and information regarding incidental catches of short-tailed albatross.
- 2. NMFS should conduct a study to determine whether the circle hooks now required in the shallow-set fishery produce hooking-related injuries to seabirds, and compare those results with hooking-related injuries to seabirds caused by "J" hooks in the Hawaii longline fishery. If it's shown that circle hooks cause fewer injuries, the USFWS would recommend they be adopted in the deep-set fishery as well.
- 3. NMFS should continue to support research into effective seabird deterrent devices and strategies (e.g., underwater setting chutes and capsules and lining tubes) that reduce risk of interaction between seabirds and Hawaii-based longline gear and fishing-related activities. The Terms and Conditions of the BiOp may be amended to incorporate successful new deterrent devices or strategies.

4. NMFS should investigate the rate at which Laysan and black-footed albatross "fall off" longline gear as a result of being injured, hooked, or entangled during the set.

1.3 Fisheries Managed under the Pelagics FMP

This section describes the unique and diverse fisheries managed under the Pelagics FMP (Table 1.3-1). These fisheries vary greatly in size, capitalization, landings, and geographic coverage. For example, longline vessels from Hawaii may fish closer to California or Alaska than to Hawaii on trips lasting for weeks, while the smaller handline, troll, charter and pole-and-line fisheries generally occur within 25 miles of land, with trips lasting only one day.

Table 1.3-1 Pelagic Fisheries in the Western Pacific Region.

Fishery	Geographic Area						
	Hawaii	American Samoa	Guam	Northern Mariana Islands	PRIA		
Longline	✓	✓					
Commercial Troll	✓	1	✓	√			
Charter Troll	✓		✓	✓			
Commercial Handline	✓						
Recreational Troll	√	1	/	√	1		
Pole-and-line (baitboat)	√						

Source: WPRFMC 2004a.

The Pelagics FMP employs several permitting, control and monitoring mechanisms within the fisheries managed. Table 1.3-2 summarizes the permits and monitoring mechanisms for existing and potential Pelagics FMP fisheries. The Hawaii-based longline fishery is a limited entry fishery, with caps on the number of permits available (164) and vessel size (101 feet). Logbooks and a satellite tracking system (Vessel Monitoring System or VMS) are required, and sufficient NMFS observers are deployed in the fleet to result in a minimum average of twenty percent coverage. The recently reauthorized swordfish component of the fleet will operate with additional requirements including mandatory use of circle hooks and mackerel-type bait and one hundred percent observer coverage (a requirement of the April 2, 2004 regulations). In 2003, all 164 permits were maintained, 123 with vessels registered to them (PIRO unpub. data).

Longline fishing by U.S. vessels landing in other western Pacific region ports (currently only American Samoa, but potentially Guam and the Northern Mariana Islands, as well) are managed under a "General Longline Fishing Permit" system that requires a logbook, but not VMS or observers at this time. However, an observer program is currently being developed and the

Council has approved an access limitation system for the American Samoa longline fishery (Amendment 11 to the Pelagics FMP). In 2003, 66 General Longline Permits were issued, 64 for vessels in American Samoa, one in Guam and one in the Northern Mariana Islands (PIRO unpub. data).

Fisheries other than longlining are subject to fewer permitting, monitoring and control mechanisms. Various data collection systems developed and maintained by the island governments remain the primary source of catch and effort data for pelagic fisheries other than longlining. In October 2002, a permit and reporting system was established for fishing for PMUS in the PRIA, but to date no permits have been applied for.

Table 1.3-2 Permit and Monitoring Mechanisms for Existing and Potential Fisheries Managed Under the Pelagics FMP.

		Area								
Fishery	Hawaii ¹	American Samoa	Guam	Northern Mariana Islands	PRIA					
Longline	Limited Entry Permit; Observers; Logbook; VMS; Commercial Catch Report; Fish Dealer Report	General Longline Permit; Logbook; Daily Effort Census; Offshore Creel Survey; Commercial Purchase System; Cannery Sampling Form; Observer and Limited Entry Programs in Development	General Longline Permit; Logbook; Offshore Creel Survey; Commercial Fish Receipt Book Program	General Longline Permit; Logbook; Commercial Purchase Data Base; Offshore Creel Survey	General Longline Permit; Logbook					
Handline	Commercial Catch Report; Fish Dealer Report	Offshore Creel Survey; Commercial Purchase System; Cannery Sampling Form	Offshore Creel Survey; Commercial Fish Receipt Book Program	Commercial Purchase Data Base; Offshore Creel Survey	Permit and Catch and Effort Report.					
Commercial Troll	Commercial Catch Report; Fish Dealer Report	Offshore Creel Survey; Commercial Purchase System; Cannery Sampling Form	Offshore Creel Survey; Commercial Fish Receipt Book Program	Commercial Purchase Data Base; Offshore Creel Survey	Permit and Catch and Effort Report.					
Charter Troll	Commercial Catch Reporting System; Fish Dealer Report	Offshore Creel Survey System; Commercial Purchase System	Offshore Creel Survey System; Commercial Fish Receipt Book Program	Commercial Purchase Data Base; Offshore Creel Survey	Permit and Catch and Effort Report.					

	Area						
Fishery	Hawaii ¹	American Samoa	Guam	Northern Mariana Islands	PRIA		
Recreational Troll	Marine Recreational Fisheries Statistical Survey	Offshore Creel Survey System	Offshore Creel Survey System	Offshore Creel Survey	Permit and Catch and Effort Report.		
Pole-and- Line	Commercial Catch Reporting System; Fish Dealer Report	Offshore Creel Survey System; Commercial Purchase System	Offshore Creel Survey System; Commercial Fish Receipt Book Program	Commercial Purchase Data Base; Offshore Creel Survey	Permit and Catch and Effort Report.		

¹ Hawaii-based boats occasionally fish in waters near some PRIA.

Source: WPRFMC 2004a.

In addition, there are areas closed to longline fishing to avoid catch competition and gear conflicts with coastal fisheries, and minimize interactions with protected species. These areas are as follows:

- 1. NWHI Protected Species Zone All waters within 50 nm of the islands and atolls of the NWHI from Kure Atoll to Nihoa Island, as well as certain corridors between those islands that are more than 100 nm apart.
- 2. Main Hawaiian Islands (MHI) Prohibited Zone All waters within 75 nm of the islands of Oahu, Kauai, Niihau and Kaula, and within 50 nm of Hawaii, Maui, Kahoolawe, Lanai and Molokai. This prohibition is lessened from October 1 through June 30, when the longline closed areas decrease on the windward sides to approximately 25 nm off Hawaii, Maui, Kahoolawe, Lanai, Molokai, Kauai, Niihau and Kaula and approximately 50 nm off Oahu.
- 3. Guam Prohibited Zone All waters within 50 nm around Guam and its offshore banks.
- 4. American Samoa Large Vessel Prohibited Zone Vessels greater than 50 feet in overall length are prohibited from fishing for PMUS within approximately 50 nm around the islands of American Samoa including Tutuila, Manua, and Swains Islands and Rose Atoll.

Table 1.3-3 presents an overview of landings throughout the region in 2002, the latest year for which data were available for all areas. Hawaii landings decreased slightly (-1.7%) from 2001. In American Samoa, total landings of all pelagic species increased 92%, continuing an upward trend in pelagic landings that commenced in 1994. Pelagic landings in Guam decreased 30% from 2001 due to several factors including economic recession in Japan, post-September 11, 2001 declines in visitor travel, and two major typhoons. Northern Mariana Islands landings increased sharply (86.6%) to about ten percent over the long-term average.

In 2002, landings in Hawaii and American Samoa dwarfed those of Guam and the Northern Mariana Islands. The American Samoa landings consist mostly of albacore for the canneries, while Hawaii landings are more diverse and targeted towards fresh fish markets.

Table 1.3-3 Total Pelagic Landings (pounds [lb]) by Type of Fish in the Western Pacific Region in 2002.

Fish	Hawaii	American Samoa	Guam	Northern Mariana Islands	Total
Tuna	15,238,000	15,136,000	221,000	207,000	30,802,000
Billfish	2,391,000	128,000	56,000	1,000	2,576,000
Other Pelagics	3,375,000	463,000	257,000	45,000	4,140,000
Sharks	388,000	7,000	0	0	395,000
Total	21,392,000	15,733,000	534,000	253,000	37,912,000

Source: WPRFMC 2004a. Values rounded to nearest 1,000 lb. Totals may not sum due to rounding.

Table 1.3-4 summarizes total landings, including estimates of the recreational component, throughout the region by fishery. The data categories are somewhat inconsistent due to the different reporting methods used by the respective government agencies.

Table 1.3-4 Total Pelagic Landings (lb) by Fishery in the Western Pacific Region in 2002.

Fishery	Hawaii	American Samoa	Guam	Northern Mariana Islands	Total
Longline	17,160,000	15,705,339			32,865,339
Handline	1,900,000				1,900,000
Commercial Troll		25,235	486,146		2,652,363
Charter Troll	1,840,000		47,708	253,274	
Recreational Troll	12,932,744	46,462	419,486	90,374	13,489,066
Pole-and-Line	530,000				530,000
Total	34,362,744	15,777,036	953,340	343,648	51,436,768

Source: WPRFMC 2004.

The following paragraphs describe the principal fisheries of the region managed under the Pelagics FMP.

1.3.1 Longline Fisheries

There are established longline fisheries in Hawaii and American Samoa and prospective longline fisheries in Guam and the Northern Mariana Islands.

1.3.1.1 Hawaii-based Longline Fishery

Of all Pelagics FMP fisheries, the Hawaii-based limited entry longline fishery is the largest. This fishery accounted for 80 percent of Hawaii's commercial pelagic landings (17.16 million lb) in 2002 (WPRFMC 2004a). The fleet includes a few wood and fiberglass vessels, and many newer steel longliners that were previously engaged in fisheries off the U.S. mainland.

The longline fleet has historically operated in two distinct modes based on gear deployment: deep-set longline by vessels that target primarily bigeye tuna and shallow-set longline by those that target swordfish or have mixed target trips including albacore and yellowfin tuna. Swordfish and mixed target sets have few hooks between floats, and are relatively shallow. These sets use a large number of light sticks, as swordfish are primarily targeted at night. Tuna sets use a different type of float placed much further apart, have more hooks per foot between the floats and the hooks are set much deeper in the water column. These sets must be placed by use of a line-shooter to provide slack in the line which allows it to rapidly sink.

The historical characteristics and performance of the Hawaii-based longline fishery are summarized in Table 1.3-5. The rapid growth of the fishery in the 1990s and the effects of the prohibition of shallow-setting in 2001 are clearly seen. Also evident is the reduction in shark bycatch brought about by the combined effects of the prohibition of shallow-setting in 2001 and passage of the Shark Finning Prohibition Act.

Table 1.3-5 Hawaii-based Longline Fishery Landings - Historical Summary.

Year	Total Catch (1000 lb)	Tuna Catch (1000 lb)	Swordfish Catch (1000 lb)	Shark Catch (1000 lb)	No. Vessels	No. Trips	No. Hooks (10 ⁶)	Total Revenue (\$1000) (Adjusted to 2002 \$)
1987	3,890	2,705	52	43	37	1	-	35,290
1988	6,710	4,725	52	94	50	i	1	42,590
1989	9,940	5,921	619	203	88	ı	1	50,150
1990	14,730	6,162	5,372	222	138	-	-	57,250
1991	19,480	5,797	9,939	318	141	1,671	12.3	64,770
1992	21,110	4,908	12,566	410	123	1,266	11.7	63,400
1993	25,010	7,205	13,027	1,736	122	1,192	13.0	72,480
1994	18,140	6,540	7,002	1,761	125	1,106	12.0	58,320
1995	22,720	8,898	5,981	3,468	110	1,125	14.2	57,650

Year	Total Catch (1000 lb)	Tuna Catch (1000 lb)	Swordfish Catch (1000 lb)	Shark Catch (1000 lb)	No. Vessels	No. Trips	No. Hooks (10 ⁶)	Total Revenue (\$1000) (Adjusted to 2002 \$)
1996	21,550	8,074	5,517	4,327	103	1,100	14.4	57,620
1997	27,150	11,826	6,352	5,010	105	1,125	15.6	63,810
1998	28,630	11,359	7,193	6,212	114	1,140	17.4	59,570
1999	28,350	10,529	6,835	6,272	119	1,137	19.1	61,520
2000	23,810	10,534	6,502	3,297	125	1,103	20.3	62,440
2001	15,550	10,720	485	327	101	1,034	22.4	43,110
2002	17,160	12,365	450	388	100	1,162	27.2	45,440
Mean	18,995.6	8,016.8	5,496.5	2,130.5	106.3	1,180.1	16.6	55,963.1
S.D.	7,423.2	2,939.8	4,234.9	2,291.5	28.3	164.5	4.8	9,939.3

Source: WPRFMC 2004.

1.3.1.2 American Samoa Longline Fishery

The characteristics and historical performance of the American Samoa-based longline fishery are summarized in Table 1.3-6. The fishery experienced rapid growth in the late 1990s, but the 2001 prohibition of shallow-setting in the Hawaii-based longline fishery resulted in a number of the displaced vessels relocating to American Samoa. The 2002 catch and effort data clearly show this dramatic development.

Table 1.3-6 American Samoa Tuna Landings - Historical Summary.

Year	Total Tuna Landings (lb)	Commercial Tuna Landings (lb)	Tuna Revenue (Adjusted to \$2002)	Longline Tuna Landings (lb) ¹	No. Longline Vessels	No. Longline Sets	No. Hooks (10 ⁴)
1982	23,042	22,065	32,112	0	0	0	0
1983	90,057	85,069	98,324	0	0	0	0
1984	198,961	196,100	189,259	0	0	0	0
1985	107,659	99,987	155,200	0	0	0	0
1986	187,909	167,791	216,548	0	0	0	0
1987	144,121	132,316	166,545	0	0	0	0
1988	207,083	172,788	210,680	3,650	3	31	1
1989	173,518	114,671	156,776	373	0	3	0
1990	78,827	55,420	80,864	0	0	0	0

Year	Total Tuna Landings (lb)	Commercial Tuna Landings (lb)	Tuna Revenue (Adjusted to \$2002)	Longline Tuna Landings (lb) ¹	No. Longline Vessels	No. Longline Sets	No. Hooks (10 ⁴)
1991	71,425	57,474	116,325	2,355	2	21	0
1992	92,600	88,953	165,815	0	0	0	0
1993	45,806	43,525	101,125	2,878	4	17	2
1994	187,459	186,199	391,444	3,310	5	19	0
1995	282,879	276,332	359,846	64,819	5	184	45
1996	315,320	309,147	433,853	223,952	12	650	157
1997	791,399	789,260	994,937	739,674	21	2,009	512
1998	1,160,079	1,114,702	1,324,980	1,138,362	25	2,582	1,042
1999	1,007,322	949,355	1,077,979	960,466	29	2,978	1,229
2000	1,668,188	1,630,410	1,663,931	1,647,753	37	3,598	1,567
2001	7,863,880	7,795,827	8,252,451	7,842,986	62	4,722	5,806
2002	15,136,343	14,961,570	13,334,876	15,112,713	58	7,419	13,219
Mean	1,420,662	1,392,808	1,405,899	-	18	3,423	3,362
S.D.	3,483,025	3,448,105	3,176,052	-	20	2,010	4,386

¹ Summed from individual species reports.

Source: WPRFMC 2004a.

1.3.2 Handline Fisheries

Handline fishing is an ancient technique used to catch yellowfin and bigeye tunas with simple gear and small boats. Handline gear is set below the surface to catch relatively small quantities of large, deep-swimming tuna that are suitable for sashimi markets. This fishery continues in isolated areas of the Pacific Ocean and is the basis of an important commercial fishery in Hawaii. Three methods of pelagic handline fishing are practiced in Hawaii, the ika-shibi (nighttime) and palu-ahi (daytime) methods (termed the MHI handline fishery in the Pelagics FMP Annual Report) and seamount fishing (which combines both handline and troll methods), which is called the offshore handline fishery for data aggregation purposes. (The ika-shibi fishery is one of the two coastal fisheries in Hawaii that harvest squid, in this case for tuna bait.) Commercial handline fisheries have not developed in the other island areas of the region, which lack well-developed markets for fresh, high-quality tuna.

The MHI (coastal) handline fisheries in Hawaii (ika-shibi and palu-ahi) produced 1.25 million pounds of pelagic catch worth \$2.1 million while the offshore (seamount) handline fishery landed 620,000 pounds worth \$610,000 in 2002. Both sectors of the handline fishery showed decreased landings, decreased revenues and decreased per lb prices for their catches in 2002 as compared with 2001. Preliminary data for 2003 indicate a continued decline in the MHI handline

fishery landings and a precipitous decline in the offshore handline landings to only 80,000 pounds. Several explanations for this were put forth at a recent Pelagics FMP Plan Team Meeting (27-29 April, 2004) including relocation of effort from the seamounts to "private fish aggregating devices" (PFADs) closer to shore, data reduction conventions that would group PFAD-associated landings into MHI handline landings rather than offshore handline landings based on distance from shore, and routine under-reporting of PFAD-associated landings on the "neighbor islands" of Hawaii (islands other than Oahu).

1.3.3 Hawaii Pole-and-Line (Baitboat) Fishery

The Hawaii-based skipjack tuna (aku) fishery is also known as the pole-and-line fishery or the baitboat fishery because of its use of live bait. The aku fishery is a labor-intensive and highly selective operation. Live bait is broadcast to entice the primary targets of skipjack and juvenile yellowfin tuna to bite on lures made from barbless hooks with feather skirts. Skipjack and juvenile yellowfin tuna are hooked on lines and in one motion swung onto the boat deck by crew members.

In the western Pacific region, only Hawaii has this type of fishery, but it is a shrinking remnant of a once dominant fishery that supplied the now defunct tuna cannery in Honolulu. Landings in 2001, now supplying the fresh fish market, were a little over one million pounds, but decreased to about 620,000 pounds in 2002 (WPRFMC 2004a). With the exception of one modern vessel constructed for this fishery in recent years, the fleet consists of 50-60 years old wooden sampans with little remaining serviceable life. Compounding problems in this fishery is the ban on collecting bait in Pearl Harbor instituted following the terrorist attacks of September 11, 2001. Pearl Harbor was formerly the primary source of live bait for this fishery.

1.3.4 Troll Fisheries

Troll fisheries, commercial, charter and/or recreational, exist in all parts of the western Pacific region. Troll fishing is conducted by towing lures or baited hooks from a moving vessel, using big-game-type rods and reels as well as hydraulic haulers, outriggers and other gear. Four to six lines rigged with artificial lures or bait may be trolled when outrigger poles are used to keep gear from tangling. Small handline gear may be deployed closer to the boat to catch small tuna which then may be used as live bait for billfish.

In Hawaii, commercial/charter trollers landed 1.84 million pounds of pelagic fish in 2002 worth \$2.95 million (WPRFMC 2004a). Hawaii's commercial troll landings, however, are dwarfed by recreational troll landings, estimated at 12.9 million pounds in 2002 (WPRFMC 2004a). The recreational fleet primarily employs troll gear to target pelagic species. Although their motivation for fishing is recreational, some of these vessel operators sell a portion of their landings to cover fishing expenses and have been termed "expense" fishermen (Hamilton 1999). While some of the fishing methods and other characteristics of this fleet are similar to those described for the commercial troll fleet, a survey of recreational and expense fishermen showed substantial differences in equipment, avidity and catch rates compared to commercial operations. Vessel operators engaged in subsistence fishing are included in this recreational category.

In American Samoa, trolling was the most popular and productive type of fishing before 1995, when longlining was introduced. "Alias," outboard-powered catamarans about 30 feet in length, were used for trolling and bottomfishing. Since 1995, many alias have been converted to more productive longline gear, and the troll fishery has declined. Landings of pelagic species by the troll fishery in 2002 amounted to only 25,235 pounds, over ninety percent of which consisted of skipjack and yellowfin tuna. In the last several years, an influx of large longline vessels to American Samoa, precipitated in part by the ban on Hawaii-based shallow-set longlining north of the equator, has greatly increased effort and landings from longlining. The troll landings were less than 0.2% of the longline landings in 2002.

Trolling is the most popular pelagic fishing method in Guam and the Northern Mariana Islands. Most of the effort is recreational or subsistence in nature, but some catch is sold. In 2002 about 375 Guam boats landed about 533,855 pounds of pelagic species, with skipjack tuna, mahimahi, wahoo, blue marlin and yellowfin tuna most abundant, respectively. In the Northern Mariana Islands, 86 troll vessels landed 253,274 pounds of pelagic species in 2002, with skipjack tuna representing over 70% of the total weight. Landings in Guam and the Northern Mariana Islands can vary considerably from year-to-year due to weather conditions, especially the occurrence of strong typhoons which can damage boats and shoreside infrastructure, and divert labor to tasks other than fishing.

Trolling is also practiced in the inhabited PRIA, although there were no federal permit and reporting requirements in these areas until May of 2002. Prior to that time, two Hawaii-based troll and handline vessels were known to have fished in EEZ waters around Palmyra Atoll and Kingman Reef targeting pelagic (including yellowfin and bigeye tunas, wahoo, mahimahi, and sharks) and bottomfish species. Catch and effort data for these trips are unavailable. Since the broad implementation of permit and reporting requirements, there have been no permits issued or reports submitted from non-longline vessels targeting pelagic species around the PRIA.

Recent plans for a sportsfishery based on Palmyra Atoll appear to have fallen through, as did an earlier attempt to establish a fish transhipping station utilizing Palmyra's airstrip. Although a small charter and recreational fishery was based on Midway Atoll during the late 1990s, it is now defunct.

1.4 West Coast-based Highly Migratory Species FMP Fisheries

The California-based longline fishery was briefly discussed in the Pelagics FEIS (NMFS 2001a). At the time that FEIS was written, the majority of these vessels were based in Hawaii and registered to Hawaii permits, but would move to California seasonally to fish swordfish, as this allowed them to target areas further east than they could reach from Hawaii. In the latter part of 1997, 15 longline vessels migrated to California and fished mainly swordfish for the remainder of the year. The number of Hawaii-based longline vessels migrating to California increased slightly in 1998 (WPRFMC 1999). There were 18 Hawaii-based longline vessels that transited to California in the latter part of 1998 (Ito and Machado 1999). Six East Coast vessels returned in 1998, but switched from targeting swordfish to tuna (Ito and Machado 1999). In 1999, over 30 Hawaii-based longliners fished out of California (NMFS 2001a). Twenty-one California-based

longline vessels submitted HSFCA longline logbook data in 2002. All but one fished out of Hawaii before 2000 (WPRFMC 2004a).

Longline vessels operating out of California primarily target swordfish and retain marketable non-target species such as bigeye tuna, albacore tuna, and thresher shark (Table 1.4-1). Recently, the Pacific Fisheries Management Council developed an FMP for Highly Migratory Species (HMS) (i.e., pelagic) fisheries based in California, Oregon and Washington (Pacific Fisheries Management Council 2003). The management regime established for West Coast-based longliners was intended to be compatible with the Western Pacific Pelagics FMP. All restrictions then applicable to Hawaii-based longline vessels (prohibition of shallow-setting north of the equator, etc.) apply to West Coast-based vessels when fishing west of 150°W. However, the management regime for Hawaii-based vessels changed as a result of the invalidation of the 2002 BiOp (NMFS 2002a) and resulting regulations prohibiting shallow-setting, so the HMS FMP management regime is no longer compatible with the Western Pacific management regime.

Table 1.4-1 Pelagic Fishery Information for the California-based Longline Fishery.

Year	Number of Vessels	Number of Trips	Number of Sets	Number of Hooks	Fish Kept	Composition of Fish Kept
1995	10	36	311	251,704	3,023	22% swordfish; 19% blue marlin; 9% albacore tuna; 9% moonfish; <8% all others
1996	15	71	678	550,420	12,815	35% blue marlin; 16% swordfish; 13% moonfish; 12% thresher shark; <6% all others
1997	25	55	663	518,841	14,105	40% swordfish; 35% blue marlin; 10% thresher shark; 8% bigeye tuna; <2% all others
1998	28	70	922	738,739	16,899	36% swordfish; 25% blue marlin; 10% bigeye tuna; 9% thresher shark; 7% blue shark; <5% all others
1999	37	101	1,430	1,143,066	27,282	36% swordfish; 22% blue marlin; 9% moonfish; 8% bigeye tuna; 7% albacore tuna; <5% all others
2000	44	138	2,117	1,621,493	36,169	56% swordfish; 27% mahimahi; 7% albacore tuna; 5% bigeye tuna; <2% all others
2001	38	109	1,621	1,218,790	30,551	56% swordfish; 18% mahimahi; 9% blue shark; 7% bigeye tuna; 7% albacore tuna; <1% all others
2002	21	91	1,294	948,657	25,507	69% swordfish; 26% blue shark; 2% bigeye tuna; <1% all others

Source: PIFSC, NMFS logbook data 1995-2002.

1.5 Foreign and Non-FMP U.S. Fisheries

This section describes non-FMP management regimes affecting fishing for PMUS in the Pacific Ocean and the magnitude of their landings.

1.5.1 International Cooperation in Fisheries Conservation and Management in the Pacific Ocean

The U.S. is a member of more than a dozen international fisheries commissions and related organizations. Fishing by U.S. distant water vessels on the high seas and within foreign Fishery Zones (EEZs) in the Pacific Ocean is controlled, managed, and monitored by various multilateral organizations, agreements, conventions and laws outside of the Magnuson-Stevens Act and the Pelagics FMP. To establish the broader context for management of pelagic species in the Pacific Ocean, the more important international agreements, organizations and conventions to which the U.S. is a Party are briefly described below.

1.5.1.1 The International Legal Context

The 1982 United Nations Convention on the Law of the Sea provided a framework for a number of important international agreements, plans, conventions and programs, which themselves became building blocks for further agreements. The three most important are introduced below.

1.5.1.1.1 Food and Agriculture Organization (FAO) Compliance Agreement and the U.S. High Seas Fishing Compliance Act

The 1993 "Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas" (Compliance Agreement), was adopted by the Conference of the Food and Agriculture Organization (FAO) of the United Nations (UN) on November 24, 1993. The Agreement contains three basic requirements:

- 1. Each flag State must ensure that its vessels do not engage in any activity that undermines the effectiveness of international fishery conservation and management measures, whether or not the flag State is a member of the regional fishery organization that adopted such measures.
- 2. No flag State shall allow any of its vessels to be used for fishing on the high seas unless the flag State has specifically authorized it to do so.
- 3. No flag State shall grant such authority to a vessel unless the flag State is able to control the fishing activities of that vessel.

Most major fishing States are party to the agreement. In the U.S., this agreement was implemented by the Fisheries Act of 1995 (Public Law 104-43), Title I - High Seas Fishing Compliance Act of 1995 (16 U.S.C. 5502) which establishes a system of permitting, reporting and regulation for vessels of the U.S. fishing on the high seas. The Act prohibits high seas¹⁴

¹⁴The HSFCA defines "high seas" as the waters beyond the territorial sea or exclusive economic zone (or the equivalent) of any Nation, to the extent such territorial sea or exclusive economic zone (or the equivalent) is recognized by the U.S..

fishing vessels of the U.S. from engaging in commercial harvesting operations on the high seas without a valid permit. The Secretary of Commerce is responsible for establishing permit conditions and restrictions consistent with U.S. obligations under the Agreement, including vessel marking and requiring reports of fishing operations and catch statistics. The Secretary must maintain records of permits issued and supply the FAO with specified information, including non-compliance by U.S. vessels. The Secretary may promulgate regulations consistent, to the extent practical, with regulations implementing FMPs formulated under the MSA. U.S. vessels holding other NMFS permits, such as a Hawaii-based longline limited entry permit, must also obtain a HSFCA permit if they fish on the high seas. Most, if not all, of the vessels that would be or potentially would be affected by the measures considered in this EIS are or would be required to be permitted under the HSFCA.

"Historically, a permit issued under the HSFCA has listed the international living marine resource agreements recognized by the U.S. and noted that holders of HSFCA permits must act in compliance with the listed agreements, including any international conservation and management measures implemented under the agreements. The only restrictions on such HSFCA permit holders were to abide by such international conservation and management measures and any measures that might apply under a Magnuson-Stevens Fishery Conservation and Management Act fishery management plan" (letter from W.T. Hogarth, Asst. Admin. for Fisheries, NMFS to HSFCA permit holders, Feb. 23, 2004). As a result of a 2003 decision by the U.S. Court of Appeals for the Ninth Circuit, this policy changed. The Court ruled that NMFS has the legal obligation to consult, pursuant to section 7 of the ESA, on the issuance of HSFCA permits, and that permits may be conditioned as necessary to protect or benefit listed species.

For vessels currently fishing under a valid HSFCA permit, this ruling did not affect their operations for the remainder of the five-year term of their permit. However, as of February 23, 2004, applications for permit renewals or for new permits became subject to new requirements. Permits "will no longer authorize permit holders to fish with any gear anywhere on the high seas they chose for any target species they chose. Only specific high seas fishing activities will be authorized by HSFCA permits in the future. Activities not specifically authorized are prohibited" (letter from W.T. Hogarth, Asst. Admin. for Fisheries, NMFS to HSFCA permit holders, Feb. 23, 2004). Future permits will thus be specific to the permitted gear type.

The purpose of this moratorium is to bring the high seas fishing activities of U.S. vessels into compliance with ESA, MMPA and NEPA requirements. Some of the fisheries authorized under HSFCA permits are presently in full compliance with these acts, and permits will continue to be issued for these fisheries. Permits for other previously authorized high seas fisheries will not be issued until those fisheries are brought into full compliance with ESA and NEPA requirements. In the Pacific Ocean, these latter fisheries include the high seas pelagic squid jig fishery. Bringing this fishery into compliance with NEPA is one purpose of this EIS.

1.5.1.1.2 UN Fish Stocks Agreement

The 1995 "Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks" (UN Fish Stocks

Agreement) seeks to advance an ecosystem-based approach to fisheries management, emphasizing concepts such as:

- 1. Unity of stocks and the need for management of stocks over their entire range;
- 2. The imperative for compatibility of EEZ and high seas fisheries regimes;
- 3. A concern with the catch of non-targeted species and the interdependence of stocks;
- 4. The need for a precautionary approach to fisheries management; and
- 5. Transparency in the decision-making and activities of regional fisheries management organizations and arrangements.

The UN Fish Stocks Agreement also provides means with which to give effect to this new conceptualization of fisheries management, stressing the role and responsibility of regional fisheries bodies to ensure protection of stocks in areas beyond the jurisdictions of coastal states. This Agreement entered into force on December 11, 2001 with ratification of the thirtieth Party. It establishes compulsory standards for managing highly migratory and shared fishery resources. Parties shall cooperate in the collection and exchange of fishery data and give enforcement agents increased authority to board and inspect fishing vessels on the high seas. The Parties commit to cooperation in regional fisheries management organizations.

1.5.1.1.3 FAO Code of Conduct

The 1995 FAO "Code of Conduct for Responsible Fisheries" (Code of Conduct) is a voluntary agreement, although certain parts of it are based on relevant rules of international law. Precipitated by discussions at the United Nations' conference on straddling and highly migratory stocks in the summer of 1993 about illegal fishing practices by vessels flying flags of convenience, the Code of Conduct is a sweeping statement of principles and approaches recommended to promote the sustainable use of world fisheries and addresses its technical, economic, ecological, legal, and management aspects. Among its 12 articles are requirements for States to promote the prevention of overfishing and reduction of excess fishing capacity and to employ the precautionary approach in fisheries management.

1.5.1.2 Regional Fisheries Conventions, Organizations and Treaties

1.5.1.2.1 Inter-American Tropical Tuna Commission

One of the first and most successful of the regional fisheries bodies resulted from the "Convention between the U.S. of America and the Republic of Costa Rica for the Establishment of an Inter-American Tropical Tuna Commission" (IATTC). Established in 1950 and headquartered in La Jolla, California, the IATTC is responsible for the conservation and management of fisheries for tunas and other species taken by tuna-fishing vessels in the eastern Pacific Ocean (EPO). Member States include Costa Rica, Ecuador, El Salvador, France, Guatemala, Japan, Mexico, Nicaragua, Panama, Peru, Spain, U.S., Vanuatu, and Venezuela.

The main objectives of the IATTC are to maintain the populations of yellowfin and skipjack tuna and other kinds of fish taken by tuna vessels in the EPO and to cooperate in the gathering and interpretation of factual information to facilitate maintaining the populations of these fish at a level which permits maximum sustainable catches year after year. The area of responsibility of the IATTC is bounded by 40°N, 40°S and 150°W.

1.5.1.2.2 South Pacific Forum Fisheries Agency

Multilateral oversight of pelagic fishing effort in the central and western Pacific Ocean arose as fishing effort in that region increased. In 1979, the South Pacific Forum Fisheries Agency Convention was put into place. The Forum Fisheries Agency (FFA), headquartered in Honiara, Solomon Islands, is governed by the Forum Fisheries Committee (FFC) composed of members from the Parties to the Convention: Australia, the Cook Islands, the Federated States of Micronesia (FSM), Fiji, Kiribati, the Marshall Islands, Nauru, New Zealand, Niue, Palau, Papua New Guinea (PNG), Samoa, the Solomon Islands, Tonga, Tuvalu, and Vanuatu.

The objectives of the FFA are the conservation and optimum utilization of the species covered by the Convention; the promotion of regional cooperation and coordination in respect of fisheries policies; securing of maximum benefits from the living resources of the region for their peoples and for the region as a whole and in particular the developing countries; and facilitating the collection, analysis, evaluation and dissemination of relevant statistical, scientific and economic information about the resources covered by the Convention. The geographic area of interest of the FFA covers the central and western portions of the South Pacific Ocean and the western portion of the North Pacific Ocean.

In 1982, several members of the FFA (FSM, Kiribati, Marshall Islands, Nauru, Palau, PNG, Solomon Islands, and Tuvalu) signed the "Nauru Agreement Concerning Cooperation in the Management of Fisheries of Common Interest" (the Nauru Agreement). This agreement was made to establish a coordinated approach to the fishing of common stocks in the EEZs of the Parties by foreign fishing vessels. It established a priority system and uniform Terms and Conditions for access by vessels of distant water fishing nations, as well as requirements for vessel licenses, observers, log books, reporting of vessel movements, vessel identification, access fees, and reporting of catch and effort data.

In 1992 the same Parties (and the FFC) signed the "Palau Arrangement for the Western Pacific Purse Seine Fishery" (the Palau Arrangement) to limit the level of purse seining in the region and to create a category for domestic fishing vessels and domestically-based foreign fishing vessels with preferred access. The Palau Arrangement currently is being renegotiated to control effort based on sea days rather than numbers of vessels.

In 1995, the same Parties signed the "Federated States of Micronesia Arrangement for Regional Fisheries Access" (the FSM Arrangement), which gave domestic vessels preferred access to the Fisheries Zones of the Parties and allowed for foreign vessels to become domestically-based and increase their contribution to national fisheries development in the region.

1.5.1.2.3 South Pacific Tuna Treaty

The U.S. gained preferential access to the EEZs of the FFA Parties and surrounding high seas areas through the "Treaty on Fisheries Between the Governments of Certain Pacific Island States and the Government of the U.S. of America" (South Pacific Tuna Treaty or SPTT). Under this Treaty, U.S. purse seine tuna fishing vessels gain access to fish in vast areas of the western and central Pacific Ocean (WCPO) (subject to certain conditions), including the EEZs of the FFA Parties.

Implemented domestically by the South Pacific Tuna Act of 1988, each purse seiner must be licensed under the Treaty. Vessels used for fishing albacore tuna by the trolling method may fish in high seas areas of the Treaty Area. Re-negotiations in 2003 resulted in U.S. longline vessels also being allowed to fish on the high seas of the Treaty Area, but not within the EEZs of the Parties. The Act requires the U.S. tuna industry to provide \$3M annually in technical assistance and to pay for observers, observer training and VMS installation and operation. Operational provisions of the Treaty were recently extended for 10 years, through June 14, 2013.

1.5.1.2.4 Secretariat of the Pacific Community, Oceanic Fisheries Programme

The Secretariat of the Pacific Community (SPC) (previously the South Pacific Commission) was founded in 1947 under the Canberra Agreement by the six "Participating Governments" that administered territories in the Pacific: Australia, France, New Zealand, the Netherlands, the United Kingdom and the U.S. of America. The SPC, headquartered in Noumea, New Caledonia, is a regional technical assistance and research body that fills a consultative and advisory role. Present membership in the "Pacific Community" includes American Samoa, Cook Islands, FSM, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Nauru, New Caledonia, Niue, Northern Mariana Islands, Palau, PNG, Pitcairn Islands, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, Wallis and Futuna and the founding countries, with the exception of the Netherlands.

The SPC's Oceanic Fisheries Programme (OFP), formerly known as the Tuna and Billfish Assessment Programme, was established by the 1980 South Pacific Conference to continue work initiated by its predecessor project, the Skipjack Survey and Assessment Programme. The mission of the OFP is "to provide member countries with the scientific information and advice necessary to rationally manage fisheries exploiting the region's resources of tuna, billfish and related species." The OFP is comprised of three sections: Statistics and Monitoring; Tuna Ecology and Biology; and Stock Assessment and Modelling.

The Standing Committee on Tuna and Billfish (SCTB) was established in 1988 to provide a forum for scientists and others with an interest in the tuna stocks of the WCPO to meet to discuss scientific issues related to data, research and stock assessment. Its aims are to:

- Coordinate fisheries data collection, compilation and dissemination according to agreed principles and procedures;
- Review research on the biology, ecology, environment and fisheries for tunas and associated species in the WCPO;
- Identify research needs and provide a means of coordination, including the fostering of collaborative research, to most efficiently and effectively meet those needs;
- Review information pertaining to the status of stocks of tunas and associated species in the WCPO and to produce statements on stock status where appropriate; and
- Provide opinion on various scientific issues related to data, research and stock assessment of WCPO tuna fisheries.

The stock assessments produced by the SCTB form an important part of the species descriptions in Chapter 3 of this EIS.

1.5.1.2.5 Western and Central Pacific Tuna Convention

In the WCPO, and as a direct response to the UN Fish Stocks Agreement, the "Convention on the Conservation and Management of Highly Migratory Fish Stocks in the WCPO" (the Convention), agreed to in September 2000, is proceeding to create a regional commission to manage highly migratory fish stocks. This agreement parallels the UN Fish Stocks Agreement and incorporates concepts such as precaution, compatibility of measures taken in areas under national jurisdiction and on the high seas, and transparency in decision-making.

The objective of the Convention is to ensure, through effective management, the long-term conservation and sustainable use of highly migratory fish stocks in the WCPO. For this purpose, the Convention establishes a Commission for the Conservation and Management of Highly Migratory Fish Stocks in the WCPO. The Convention will apply to all species of highly migratory fish stocks except sauries (Family: Scomberesocidae).

The present status of the Convention is that as of 19 December 2003 13 States situated south of the 20° parallel of north latitude (Australia, Cook Islands, FSM, Fiji, Kiribati, Marshall Islands, Nauru, New Zealand, Niue, Palau, PNG, Samoa, Solomon Islands, and Tonga) had deposited instruments of ratification, acceptance, approval or accession with the New Zealand Government. The Convention entered into force on 19 June 2004, being six months after the deposit of the thirteenth instrument of ratification, acceptance, approval or accession. The Commission and its subsidiary bodies shall be open to participation, with the appropriate authorization of the Contracting Party having responsibility for its international affairs, to each of the following: American Samoa, Guam, and Northern Mariana Islands, among others.

A subsidiary body called the Northern Committee has been established to make recommendations on the implementation of conservation and management measures for the area north of 20°N and for stocks that occur mostly in that area. The Northern Committee will be composed of members situated in that area and those fishing in that area. Squid jigging in the North Pacific Ocean as well as mitigation of longline-seabird interactions will be of interest to this committee. Japan and the U.S. have established an Interim Scientific Committee (ISC) to support the Northern Committee. Additional current members include Canada, China, Korea, Mexico and Taiwan. Several international fishery organizations have observer status on the ISC.

The distinction between the Western and Central Pacific Fisheries Convention and the SPTT is that the Tuna Treaty is primarily an access arrangement for U.S. vessels, while the new Convention will establish the conservation and management measures to be adhered to by all countries and fishing entities with vessels operating on the high seas within the WCPO.

1.5.2 Landings of Foreign and Non-FMP U.S. Pelagic Fisheries in the Pacific Ocean

In comparison with the total effort and landings of pelagic fisheries in the Pacific Ocean, fisheries managed under the Pelagics FMP are small, less than one percent in 2002. Large-scale, distant-water foreign fisheries that primarily target tunas, including longline, pole-and-line and purse seine fisheries, occur in both the WCPO and the Eastern Tropical Pacific Ocean (ETPO). There are also well developed troll fisheries for albacore in both the North and South Pacific Oceans as well as gillnet and harpoon fisheries that target swordfish and marlins.

Table 1.5-1 compares the Pelagics FMP fisheries landings with those of the other major fisheries in the WCPO and ETPO. Total WCPO landings of pelagic species (excluding troll-caught albacore) are approximately 3.8 billion pounds. Pelagics FMP fisheries landings represent about one percent of that. Longline fisheries conducted under the Pelagics FMP (Hawaii- plus American Samoa-based) represent about 6% of the WCPO longline landings. Hawaii's aku fleet landings (pole-and-line fishery) represent only about 0.7% of total pole-and-line fisheries landings in the WCPO. Adding landings from the ETPO and troll-caught albacore landings to the WCPO landings yields a total Pacific Ocean-wide reported commercial catch of nearly 5.4 billion pounds of pelagic fish. The Pelagics FMP fisheries represent about 0.7% of that total. These figures do not include non-reporting sectors of fisheries, including in most areas the recreational and subsistence fisheries, and obviously the illegal, unreported and unregulated fisheries, including driftnet fisheries, that still operate surreptitiously. The 2002 recreational catch in the region was estimated to be about 13.5 million pounds, or about one third as much as the commercial catch (WPRFMC 2004a).

Table 1.5-1 Comparison of Total Pelagics FMP Fisheries Commercial Landings with Other Pacific Ocean Commercial Landings.

Fishery	2002 Landings (lb)	Percentage of Total	
Total Pelagics FMP Fisheries	37,912,000	0.7%	
WCPO Purse Seine (Including U.S. Vessels)	2,551,284,000	47.5%	
WCPO Longline (Foreign Vessels)	489,109,000	9.1%	
WCPO Pole-and-Line (Foreign Vessels)	729,840,000	13.6%	
Total WCPO (Without Albacore Troll)	3,808,145,000	70.9%	
ETPO Surface (Including Purse Seine, Poleand-Line, Gillnet, Harpoon - Including U.S. Vessels)	1,361,588,000	25.4%	
ETPO Longline (Including U.S. Vessels)	160,447,000	3.0%	
Total ETPO (Without Albacore Troll)	1,522,034,000	28.3%	
Total Pacific Ocean Albacore Troll	40,729,000	0.8%	
Total Pacific Ocean	5,370,908,000	100.0%	

Sources: WPRFMC 2004a (WCPO), IATTC 2003 (ETPO). Values rounded to nearest 1000 lb. Total may not sum due to rounding.

1.6 Permits, Licenses and Approvals Required for the Proposed Action

Implementation of modified seabird interaction avoidance measures began with approval of a provisionally Preferred Alternative by the Council at its 124th meeting (October 12-15, 2004). The provision was that consultation with the USFWS would be undertaken to determine the appropriateness of deleting two interaction avoidance measures from the suite of measures

currently required in the Hawaii-based longline fishery. Comments received from the U.S. Department of the Interior on the Draft EIS (dated October 15, 2004) stated that thawed, bluedyed bait and strategic offal discards should be retained as interaction avoidance measures. However, the letter further suggested that strategic offal discards should be used by longline vessels only when seabirds were present. A memorandum from Kitty Simonds, Executive Director of the WPFMC to Bill Robinson, PIR Regional Administrator dated January 14, 2005 (Appendix F), confirmed that the Council's Preferred Alternative reflects the DOI position. The Preferred Alternative was modified from the version that appeared in the Draft EIS to require strategic offal discards only when birds are present.

In concert with completion of this EIS, the Council has prepared a proposed regulatory amendment package, including a Regulatory Impact Review pursuant to executive order (EO) 12866, a Regulatory Flexibility Analysis pursuant to the Regulatory Flexibility Act (5 U.S.C. 601 et seq.), an analysis of compliance with the Coastal Zone Management Act (16 U.S.C. 1451 et seq.) and draft regulations, and forwarded the package to NMFS for review. If the amendment is approved, NMFS will then publish in the *Federal Register* a draft rule for public comment according to the provisions of the Administrative Procedure Act (5 U.S.C. 553) and then a final rule including the effective date of any new regulations.

Management of the pelagic squid jigging fishery under the MSA will proceed in a similar fashion, i.e., through amendment of the Pelagics FMP to include specific species of squid as PMUS. The Council will prepare an FMP amendment package and forward to NMFS for review. Although not part of the action assessed in this EIS, consultation under section 7 of the ESA will be required and categorization of the fishery under the MMPA will be necessary¹⁵. Collection of information through a logbook program will require compliance with the Paperwork Reduction Act (44 U.S.C. 3501 et seq.).

Management of the pelagic squid jigging fishery under the HSFCA will require participants to obtain an HSFCA permit. Consultation under section 7 of the ESA will be required and categorization of the fishery under the MMPA will be necessary. Collection of information through a logbook program will require compliance with the Paperwork Reduction Act.

¹⁵Each commercial fishery is annually placed into Category I, II or III. Category I includes commercial fisheries determined by the Assistant Administrator to have frequent incidental mortality and serious injury of marine mammals. Category II includes commercial fisheries determined by the Assistant Administrator to have occasional incidental mortality and serious injury of marine mammals. Category III includes commercial fisheries determined by the Assistant Administrator to have a remote likelihood of, or no known incidental mortality and serious injury of marine mammals.